

10/782,060

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal201txs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS	4	OCT 30	CHEMLIST enhanced with new search and display field
NEWS	5	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS	6	NOV 10	CA/CAPplus F-Term thesaurus enhanced
NEWS	7	NOV 10	STN Express with Discover! free maintenance release
Version			8.01c now available
NEWS	8	NOV 20	CA/CAPplus to MARPAT accession number crossover limit increased
			to 50,000
NEWS	9	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	10	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS	11	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS	12	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	13	DEC 18	CA/CAPplus pre-1967 chemical substance index entries enhanced
			with preparation role
NEWS	14	DEC 18	CA/CAPplus patent kind codes updated
NEWS	15	DEC 18	MARPAT to CA/CAPplus accession number crossover limit increased
			to 50,000
NEWS	16	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS	17	DEC 27	CA/CAPplus enhanced with more pre-1907 records
NEWS	18	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS	19	JAN 16	CA/CAPplus Company Name Thesaurus enhanced and reloaded
NEWS	20	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS	21	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS	22	JAN 22	CA/CAPplus updated with revised CAS roles
NEWS	23	JAN 22	CA/CAPplus enhanced with patent applications from India
NEWS	24	JAN 29	PHAR reloaded with new search and display fields
NEWS	25	JAN 29	CAS Registry Number crossover limit increased to 300,000 in

10/782,060

multiple databases

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:46:33 ON 10 FEB 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:46:48 ON 10 FEB 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 9 FEB 2007 HIGHEST RN 920338-10-9

DICTIONARY FILE UPDATES: 9 FEB 2007 HIGHEST RN 920338-10-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

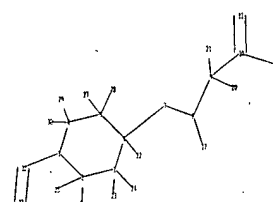
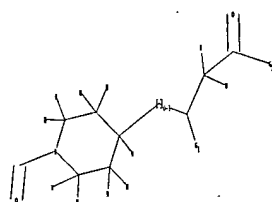
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

10/782,060

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10782060.str



chain nodes :

7 8 9 10 11 12 13 17 19 20 21 22 23 24 25 26 27 28 29 30

ring nodes :

1 2 3 4 5 6

chain bonds :

1-23 1-24 2-25 2-26 3-12 4-29 4-30 5-27 5-28 6-7 6-22 7-8 8-9
8-17 9-10 9-20 9-21 10-11 10-19 12-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

1-2 1-6 2-3 3-4 3-12 4-5 5-6 8-17 10-11 10-19 12-13

exact bonds :

10/782,060

1-23 1-24 2-25 2-26 4-29 4-30 5-27 5-28 6-7 6-22 7-8 8-9 9-10
9-20 9-21
isolated ring systems :
containing 1 :

G1: Cy, Ak

G2: O, N, OH, NH2

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 17:CLASS 19:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS

L1 .STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 14:47:12 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1395 TO ITERATE

100.0% PROCESSED 1395 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 25660 TO 30140
PROJECTED ANSWERS: 9 TO 360

L2 9 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 14:47:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 27270 TO ITERATE

100.0% PROCESSED 27270 ITERATIONS 239 ANSWERS
SEARCH TIME: 00.00.01

L3 239 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.10	172.31

FILE 'CAPLUS' ENTERED AT 14:47:28 ON 10 FEB 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

10/782,060

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Feb 2007 VOL 146 ISS 8

FILE LAST UPDATED: 9 Feb 2007 (20070209/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13

L4 22 L3

=> d 14 ibib hitstr abs 1-22

L4 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:33775 CAPLUS

TITLE: Preparation of piperidinecarboxylates as G protein-coupled receptor (GPR119) agonists.

INVENTOR(S): Bradley, Stuart Edward; Fyfe, Matthew Colin Thor; Bertram, Lisa Sarah; Gattrell, William;

Jeevaratnam,

Revathy Perpetua; Keily, John; Procter, Martin

James;

Rasamison, Chrystelle Marie; Rushworth, Philip

John;

Sambrook-Smith, Colin Peter; Stonehouse, David

French;

Swain, Simon Andrew; Williams, Geoffrey Martyn

PATENT ASSIGNEE(S): Prosidion Limited, UK

SOURCE: PCT Int. Appl., 85pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007003962	A2	20070111	WO 2006-GB50178	20060629
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

GB 2005-13277

A 20050630

GB 2006-5946

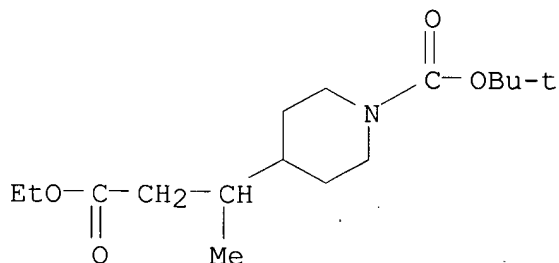
A 20060327

IT 203662-40-2

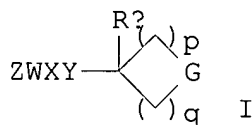
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of piperidinecarboxylates as G protein-coupled receptor (GPR119) agonists)

RN 203662-40-2 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -methyl-, ethyl ester (9CI) (CA INDEX NAME)

GI



AB Title compds. [I; Z = (substituted) Ph, 5-6 membered heteroaryl; W, Y = bond, (substituted) alkylene, alkenylene; X = CH₂, O, S, CH(OH), halomethyl, CF₂, CO, CO₂, COS, NR₅, SO, SO₂, etc.; G = CHR₃, NCO₂R₄, NCONR₄R₅, (substituted) N-heterocyclyl, N-heteroaryl, etc.; Rx = H, OH; R₃

= alkyl; R₄ = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl, etc.; R₅ = H, alkyl; p = 0-3; q = 1-5; p+q = 2-5], were

10/782,060

prepared Thus, (4-methoxycarbonylbenzyl)triphenylphosphonium bromide
in dimethoxyethane was treated portionwise with NaH; tert-Bu
4-(3-oxopropyl)piperidine-1-carboxylate in dimethoxyethane was added
followed by stirring for 20 h at room temperature to give tert-Bu
4-[(E)-4-(4-methoxycarbonylphenyl)but-3-enyl]piperidine-1-carboxylate.
I
in a cell line expressing recombinant human GPR119 generally increased
intracellular cAMP levels with EC50's of <10 μ M.

L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:13717 CAPLUS

DOCUMENT NUMBER: 146:121829

TITLE: Carbon-linked substituted piperidines and
derivatives

thereof useful as histamine H3 antagonists and
their

preparation, pharmaceutical compositions and use in
the treatment of diseases

INVENTOR(S): Aslanian, Robert G.; Berlin, Michael Y.; Huang,
Ying;

McCormick, Kevin D.; Mutahi, Mwangi W.; Shih,
Neng-Yang; Ting, Pauline C.; Tom, Wing C.; Zheng,
Junying

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 88pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2007002057	A1	20070104	WO 2006-US23937	20060619
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2007010513	A1	20070111	US 2006-455873	20060619
PRIORITY APPLN. INFO.:			US 2005-692175P	P 20050620

IT 918500-82-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

10/782,060

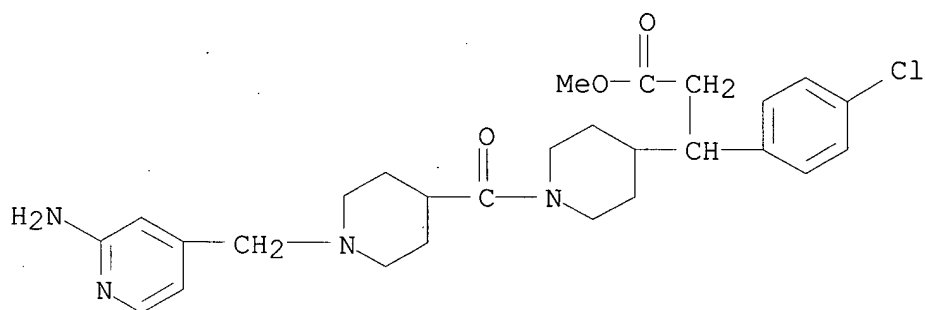
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of carbon-linked substituted piperidines and

derivs. thereof useful as histamine H3 antagonists)

RN 918500-82-0 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[[1-[(2-amino-4-pyridinyl)methyl]-4-piperidinyl]carbonyl]- β -(4-chlorophenyl)-, methyl ester (CA INDEX NAME)



IT 918501-93-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

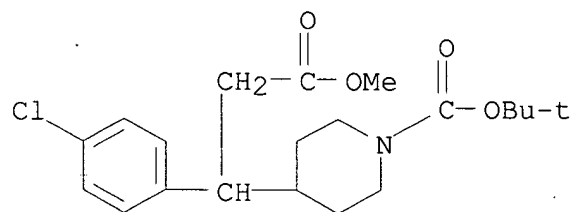
(intermediate; preparation of carbon-linked substituted piperidines

and

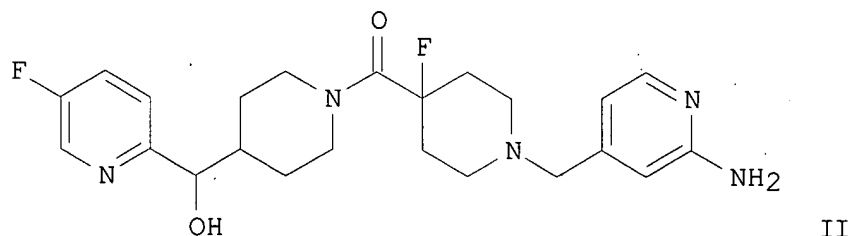
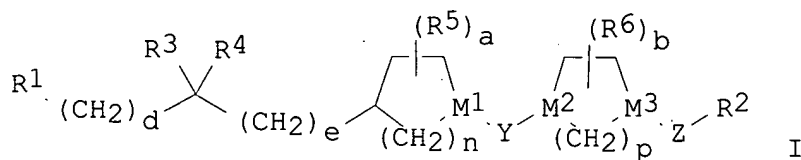
derivs. thereof useful as histamine H3 antagonists)

RN 918501-93-6 CAPLUS

CN 4-Piperidinepropanoic acid, β -(4-chlorophenyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (CA INDEX NAME)



GI



AB Disclosed are compds. of the formula I; or a pharmaceutically acceptable salt thereof, compns. and methods of treating allergy-induced airway responses, congestion, obesity, metabolic syndrome nonalcoholic fatty liver disease, hepatic steatosis, nonalcoholic steatohepatitis, cirrhosis, hepatocellular carcinoma or cognition deficit disorders using said compds., alone or in combination with other agents. Compds. of formula I wherein M1 and M3 are independently CH or N; M2 is CH, CF or N; Y is CO, CS, C1-5 alkyl, C(=NOH) and derivs., and SO1-2; Z is a bond, (un)substituted alkylene, and (un)substituted alkenylene, etc.; R1 is H, alkyl, alkenyl, (un)substituted (hetero)cycloalkyl, (hetero)aryl, etc.; R2 is (un)substituted alkyl, (un)substituted alkenyl, (un)substituted (hetero)aryl, and (un)substituted (hetero)cycloalkyl, etc.; R3 and R4 are independently H, halo, alkyl, haloalkyl, hydroxyalkyl, alkoxyalkyl, etc.; R5 and R6 are independently halo, alkyl, OH, alkoxy, haloalkyl, CN; etc.; a and b are independently 0, 1 and 2; d and e are independently 0 and 1; n and p are independently 1, 2 and 3; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by addition of

2-bromo-5-fluoropyridine to N-Boc-piperidin-4-one; the resulting 1-Boc-4-[(5-fluoropyridin-2-yl)hydroxymethyl]piperidine underwent hydrolysis to give the free amine, which underwent amidation with 1-[2-(tert-butoxycarbonylamino)pyridinylmethyl]-4-fluoropiperidine-4-carbonyl chloride followed by hydrolysis to give the coupled product,

10/782,060

which underwent hydrolysis to give compound II. All the invention compds.

were evaluated for their histamine H3 antagonistic activity (data given).

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1061760 CAPLUS

DOCUMENT NUMBER: 146:54689

TITLE: Design and Evaluation of a Novel Class-Directed 2D Fingerprint to Search for Structurally Diverse

Active

Compounds

AUTHOR(S): Eckert, Hanna; Bajorath, Juergen

CORPORATE SOURCE: Department of Life Science Informatics, B-IT, Rheinische Friedrich-Wilhelms-Universitaet, Bonn, D-53113, Germany

SOURCE: Journal of Chemical Information and Modeling (2006),

46(6), 2515-2526

CODEN: JCISD8; ISSN: 1549-9596

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal .

LANGUAGE: English

IT 669075-56-3

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(design and evaluation of a class-directed 2D fingerprint to search for

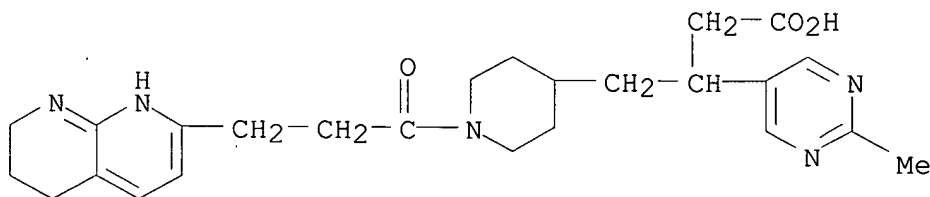
structurally diverse active compds.)

RN 669075-56-3 CAPLUS

CN 5-Pyrimidinepropanoic acid, 2-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA

INDEX NAME)



AB Recent attempts to increase similarity search performance using mol. fingerprints have mostly focused on the evaluation of alternative similarity metrics or scoring schemes, rather than the development of new

types of fingerprints. Here, the authors introduce a novel 2D fingerprint design (property descriptor value range-derived fingerprint or PDR-FP) that involves activity-oriented selection of property descriptors and the transformation of descriptor value ranges into a binary format such that each fingerprint bit position represents a specific value interval. The design is tailored toward multiple-template similarity searching and permits training on specific activity classes. In search calcns. on 15 compound classes of increasing structural diversity, the PDR fingerprint performed better than other state-of-the-art 2D fingerprints. Among the structurally diverse classes were six compound sets with peptide character, which represent a notoriously difficult chemotype for 2D similarity searching. In these cases, PDR-FP produced promising results, whereas other fingerprint methods mostly failed. PDR-FP is specifically designed for search calcns. on structurally diverse compds., and these calcns. are not influenced by mol. size effects, which represent a general problem for similarity searching using bit string representations.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:164650 CAPLUS

DOCUMENT NUMBER: 144:254006

TITLE: Preparation of piperidine derivatives as melanocortin-4 receptor agonists

INVENTOR(S): Bakshi, Raman K.; Dellureficio, James P.; Nargund, Ravi P.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2006020277	A2	20060223	WO 2005-US25505	20050715
WO 2006020277	A3	20060720		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

10/782,060

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2004-589089P

P 20040719

OTHER SOURCE(S): MARPAT 144:254006

IT 876756-71-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

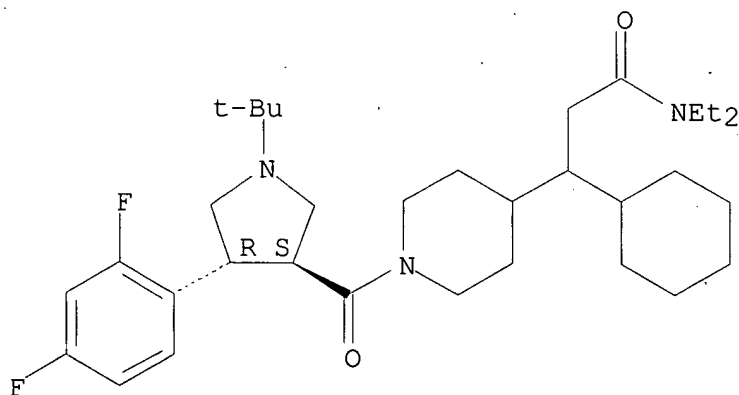
(drug candidate; preparation of piperidine derivs. as MCR-4
agonists)

RN 876756-71-7 CAPLUS

CN 4-Piperidinepropanamide, β -cyclohexyl-1-[(3S,4R)-4-(2,4-

difluorophenyl)-1-(1,1-dimethylethyl)-3-pyrrolidinyl]carbonyl]-N,N-diethyl-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 876756-96-6P 876756-97-7P 876756-98-8P
876757-01-6P 876757-11-8P 876757-12-9P
876757-13-0P 876757-14-1P 876757-15-2P
876757-23-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

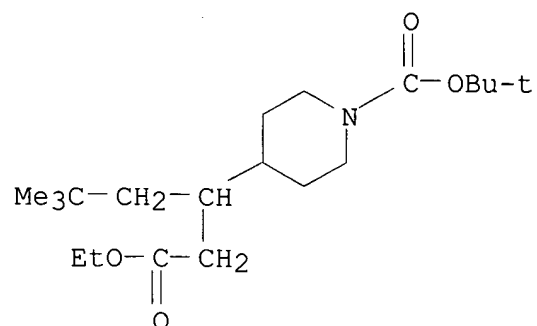
(intermediate; preparation of piperidine derivs. as MCR-4 agonists)

RN 876756-96-6 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(2,2-

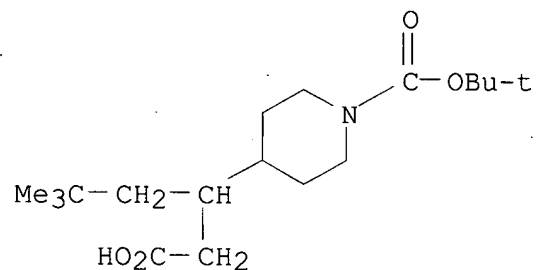
10/782,060

dimethylpropyl)-, ethyl ester (9CI) (CA INDEX NAME)



RN 876756-97-7 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-(2,2-dimethylpropyl)- (9CI) (CA INDEX NAME)

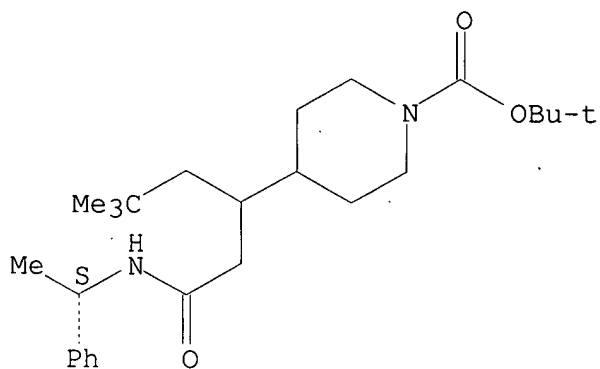


RN 876756-98-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[3,3-dimethyl-1-[2-oxo-2-[[[(1S)-1-phenylethyl]amino]ethyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

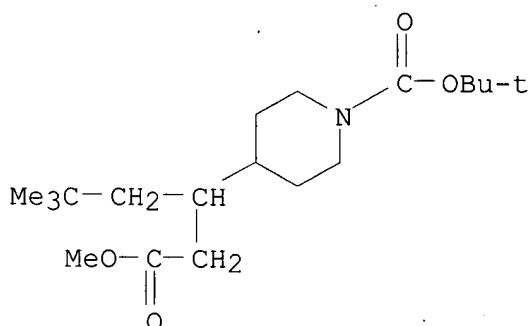
Absolute stereochemistry.

10/782,060



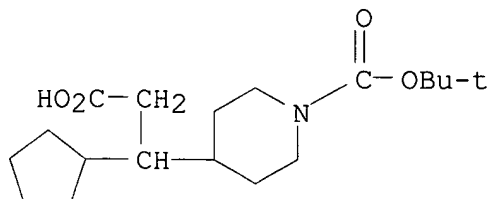
RN 876757-01-6 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(2,2-dimethylpropyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 876757-11-8 CAPLUS

CN 4-Piperidinepropanoic acid, β -cyclopentyl-1-[(1,1-dimethylethoxy)carbonyl]- (9CI) (CA INDEX NAME)

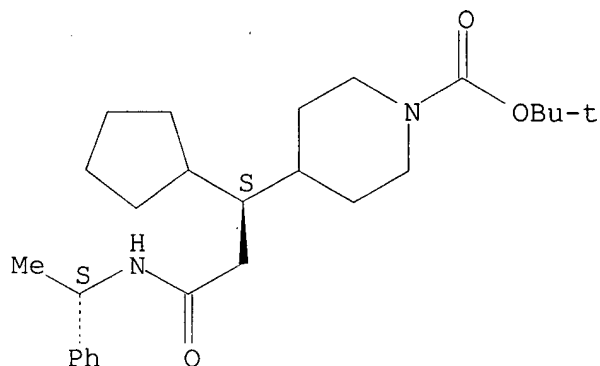


RN 876757-12-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1S)-1-cyclopentyl-3-oxo-3-[(1S)-1-phenylethylamino]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

10/782,060

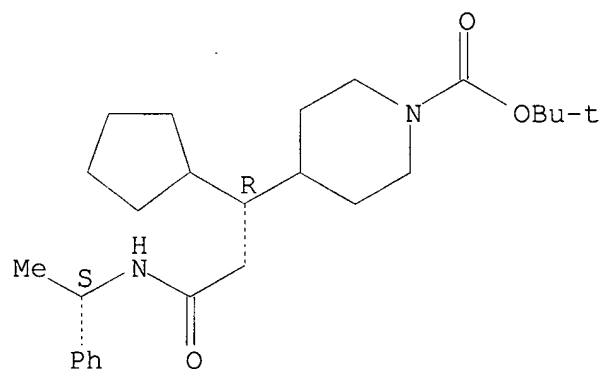
Absolute stereochemistry.



RN 876757-13-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1R)-1-cyclopentyl-3-oxo-3-[(1S)-1-phenylethyl]amino]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

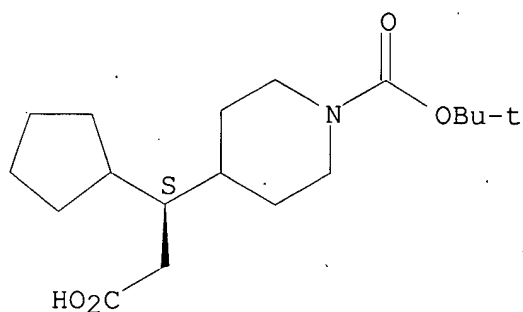


RN 876757-14-1 CAPLUS

CN 4-Piperidinepropanoic acid, β -cyclopentyl-1-[(1,1-dimethylethoxy)carbonyl]-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

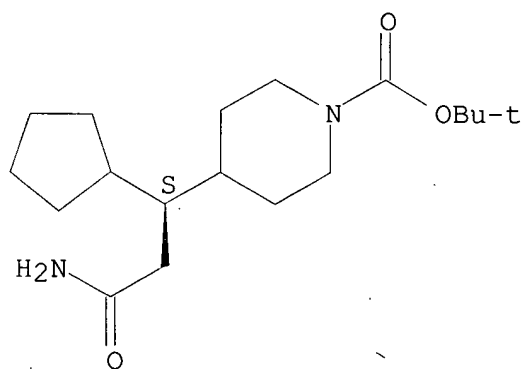
10/782,060



RN 876757-15-2 CAPLUS

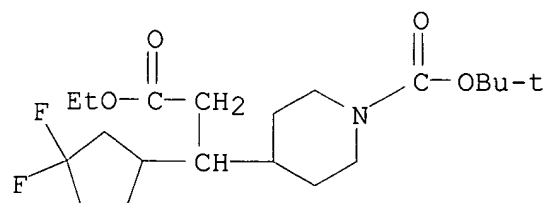
CN 1-Piperidinecarboxylic acid,
4-[(1S)-3-amino-1-cyclopentyl-3-oxopropyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 876757-23-2 CAPLUS

CN 4-Piperidinepropanoic acid, β -(3,3-difluorocyclopentyl)-1-[(1,1-dimethylethoxy)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



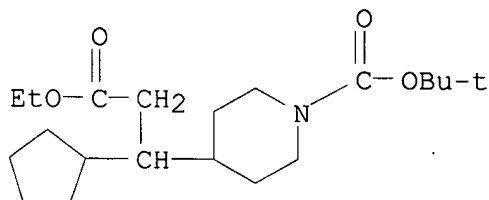
.IT 876757-40-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of piperidine derivs. as MCR-4 agonists)

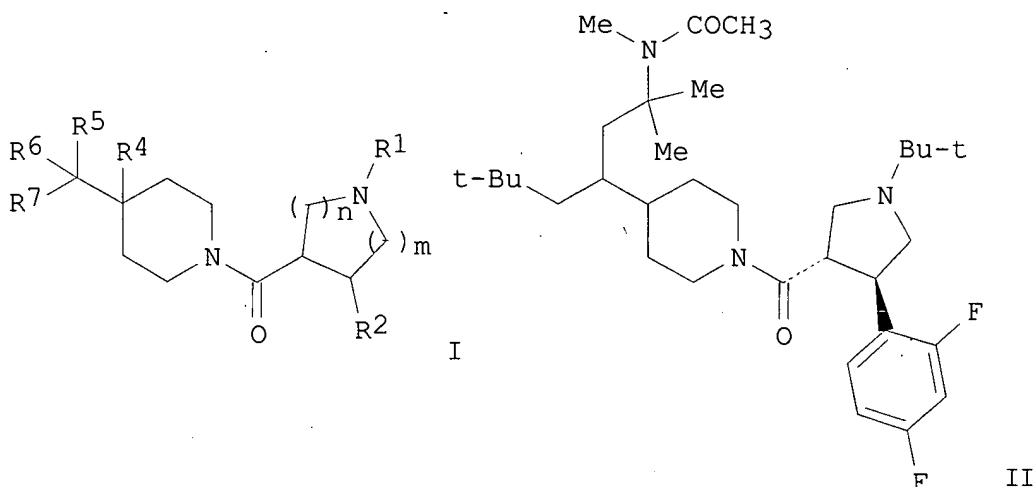
RN 876757-40-3 CAPLUS

10/782,060

CN 4-Piperidinepropanoic acid, β -cyclopentyl-1-[(1,1-dimethylethoxy)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



GI



AB The title piperidine derivs. I [wherein m = 0-2; n = 1-2; R1 = H, amidino, alkyl, etc.; R2 = (un)substituted Ph, naphthyl, or heteroaryl; R4 = H, alkyl, alkoxy, etc.; R5 = CF₃, alkyl, alkenyl, alkynyl, etc.; R6 = H, alkyl, or alkoxy; R7 = NH₂, CN, OH, alkoxy, etc.], or pharmaceutically acceptable salts thereof were prepared as agonists of the human melanocortin-4 receptors (MCR-4). For example, II was prepared in a multi-step synthesis. The title compds. showed IC₅₀ less than 10 μ M against MCR-4. Formulations with finely divided lactose as hard gelatin capsule have been described. The compds. are useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MCR-4, such as obesity, diabetes, male or female sexual dysfunction (no data).

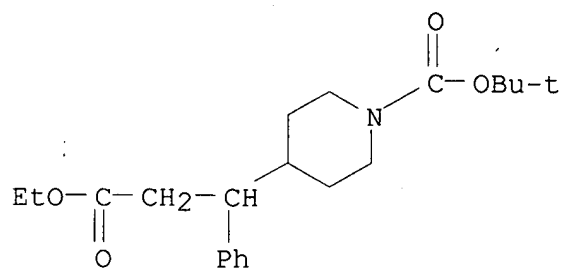
L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

10/782,060

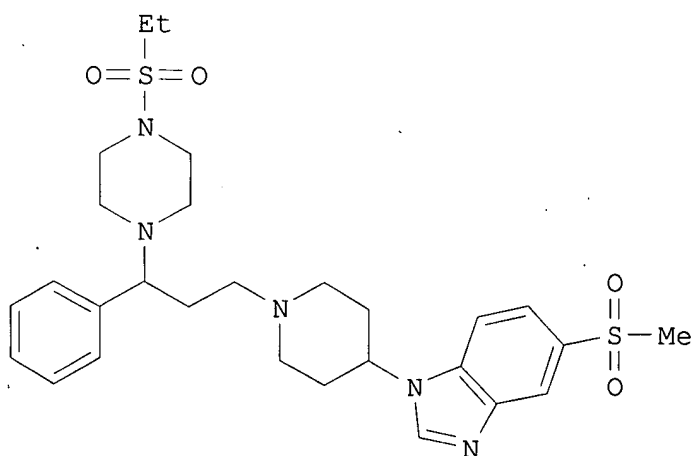
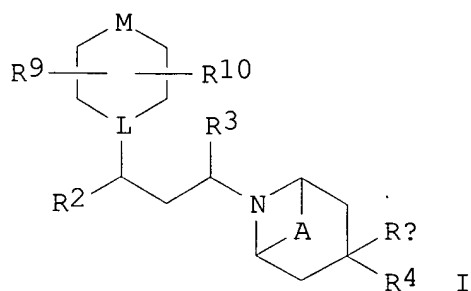
ACCESSION NUMBER: 2005:1171558 CAPLUS
DOCUMENT NUMBER: 143:440441
TITLE: Preparation of piperidine derivatives as
modulators of
chemokine receptor CCR5
INVENTOR(S): Faull, Alan; Tucker, Howard
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005101989	A2	20051103	WO 2005-SE574	20050420
WO 2005101989	A3	20060427		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2005235169	A1	20051103	AU 2005-235169	20050420
CA 2562417	A1	20051103	CA 2005-2562417	20050420
EP 1742934	A2	20070117	EP 2005-734934	20050420
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU			
PRIORITY APPLN. INFO.:			SE 2004-1057	A 20040423
			SE 2005-57	A 20050110
			WO 2005-SE574	W 20050420

OTHER SOURCE(S): CASREACT 143:440441; MARPAT 143:440441
IT 897037-75-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)
(preparation of piperidine derivs. as modulators of chemokine
receptor CCR5)
RN 897037-75-1 CAPLUS
CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -phenyl-, ethyl ester (9CI) (CA INDEX NAME)



GI



II

AB Title compds. represented by the formula I [wherein A = absent or (CH₂)₂;

L = CH or N; M = (un)substituted amino, O, SOn; n = 0-2; R₂ =

(un)substituted Ph or (halo)thienyl; R₃ = H or Me; R_b = H or alkyl; R₄

= (un)substituted heterocycle; R₉, R₁₀ = independently H or alkyl; and pharmaceutically acceptable salts thereof] were prepared as modulators of

10/782,060

chemokine receptor CCR5. For example, II was provided in a multi-step synthesis starting from the reaction of 5-(methylsulfonyl)-1-piperidin-4-yl-1H-benzimidazole with 3-chloropropiophenone. II inhibited binding of MIP-1 α to recombinant human CCR5 receptors expressed in membranes prepared from Chinese hamster ovary cells with a Pic50 of 6.0. Thus, I and their pharmaceutical compns. are useful for the treatment of CCR5-mediated diseases (no data).

L4 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:99468 CAPLUS
DOCUMENT NUMBER: 142:197888
TITLE: Preparation of piperidine derivatives as chemokine receptor modulators
INVENTOR(S): Brown, Dearg; Oldfield, John; Tucker, Howard
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005009959	A1	20050203	WO 2004-SE1149	20040726
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1654229	A1	20060510	EP 2004-749185	20040726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007500694	T	20070118	JP 2006-521803	20040726
PRIORITY APPLN. INFO.:			SE 2003-2155	A 20030731
			SE 2004-1420	A 20040603
			WO 2004-SE1149	W 20040726

OTHER SOURCE(S): CASREACT 142:197888; MARPAT 142:197888
IT 718610-71-0P

10/782,060

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT

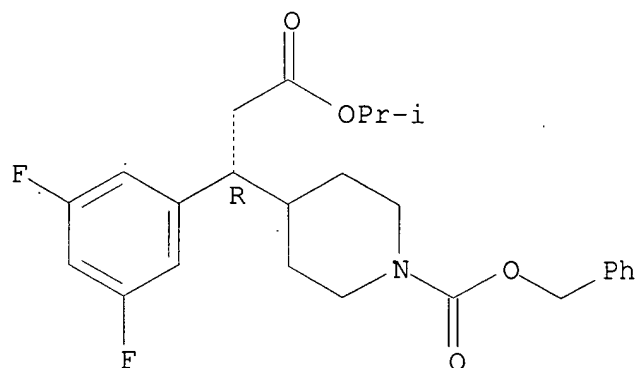
(Reactant or reagent)

(preparation of piperidine derivs. as chemokine receptor CCR5
modulators)

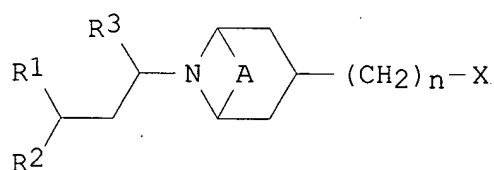
RN 718610-71-0 CAPLUS

CN 4-Piperidinepropanoic acid, β -(3,5-difluorophenyl)-1-
[(phenylmethoxy)carbonyl]-, 1-methylethyl ester, (β R)- (9CI) (CA
INDEX NAME)

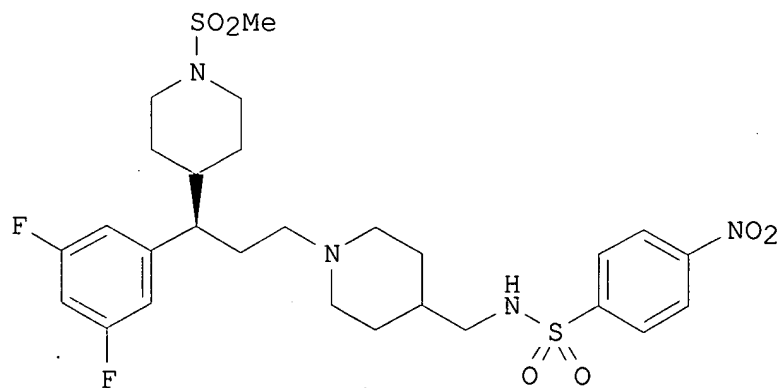
Absolute stereochemistry.



GI



I



II

10/782,060

AB Title compds. represented by the formula I [wherein A = absent or (CH₂)₂;

R1 = (un)substituted carbonylamino, carbonylalkoxy, (hetero)aryl, etc.; R2

= Ph, heteroaryl or cycloalkyl; R3 = H or alkyl; X = SO₂NR₄R₅ or NR₆SO₂R₇;

R7 = (hetero)aryl, (cyclo)alkyl, heterocyclyl or NR₈R₉; R4, R8 = (hetero)aryl, (cyclo)alkyl or heterocyclyl; R5, R6, R9 = independently H

or alkyl; or R₈R₉ = (hetero)cyclic ring; n = 1-3; and pharmaceutically acceptable salts or solvates thereof] were prepared as modulators of chemokine receptor. For example, II was given in a multi-step synthesis

starting from the reaction of N-benzyloxycarbonyl-4-formylpiperidine with

malonic acid. II showed inhibition of human CCR5 receptor with a Pic₅₀ value of 8.1. Thus, I and their pharmaceutical compns. are useful for the

treatment of CCR5 mediated diseases (no data).

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:964831 CAPLUS

DOCUMENT NUMBER: 141:410944

TITLE: Preparation of piperidinyl targeting compounds that selectively bind integrins

INVENTOR(S): De Corte. Bart; Kinney, William A.; Maryanoff, Bruce

E.; Ghosh, Shyamali; Liu, Li

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 160 pp., Cont.-in-part of U.S.

Ser. No. 641,964.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004224986	A1	20041111	US 2004-782060	20040218
US 2004077684	A1	20040422	US 2003-641964	20030815
AU 2004316476	A1	20050909	AU 2004-316476	20040329
CA 2556768	A1	20050909	CA 2004-2556768	20040329
WO 2005082889	A1	20050909	WO 2004-US9465	20040329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

10/782,060

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

EP 1718635 A1 20061108 EP 2004-749482 20040329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
NO 2006004212 A 20061115 NO 2006-4212 20060918
PRIORITY APPLN. INFO.: US 2002-404239P P 20020816

US 2003-641964 A2 20030815

US 2004-782060 A 20040218

WO 2004-US9465 W 20040329

OTHER SOURCE(S): MARPAT 141:410944

IT 669076-68-0P 669076-69-1P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN
(Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study);

PREP (Preparation); USES (Uses)

(preparation of piperidinealkanoic acids as cell targeting compds.

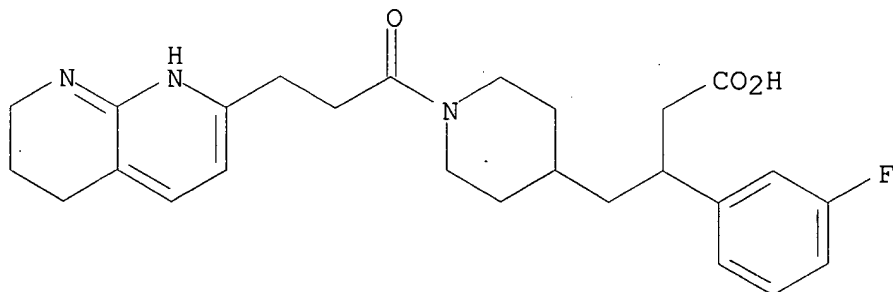
with

selective affinity to $\alpha v\beta 3$, $\alpha v\beta 5$, or
 $\alpha v\beta 6$ integrin receptors for use with imaging agents or
liposomes)

RN 669076-68-0 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-
tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (+)-(9CI) (CA INDEX NAME)

Rotation (+).



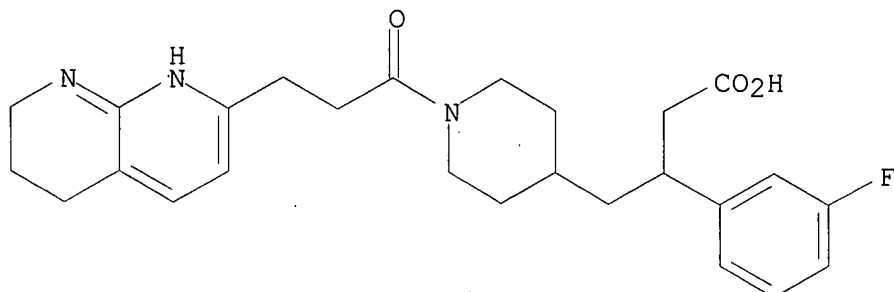
RN 669076-69-1 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-

10/782,060

tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



IT 669076-37-3P 791821-34-6P 791821-35-7P
791821-41-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

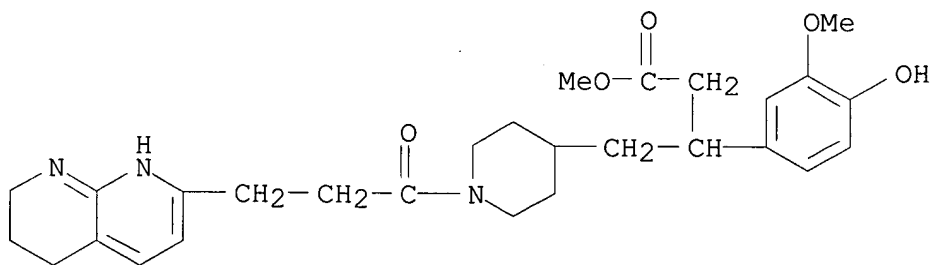
(preparation of piperidinealkanoic acids as cell targeting compds.

with

selective affinity to $\alpha v\beta 3$, $\alpha v\beta 5$, or
 $\alpha v\beta 6$ integrin receptors for use with imaging agents or
liposomes)

RN 669076-37-3 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI)
(CA INDEX NAME)

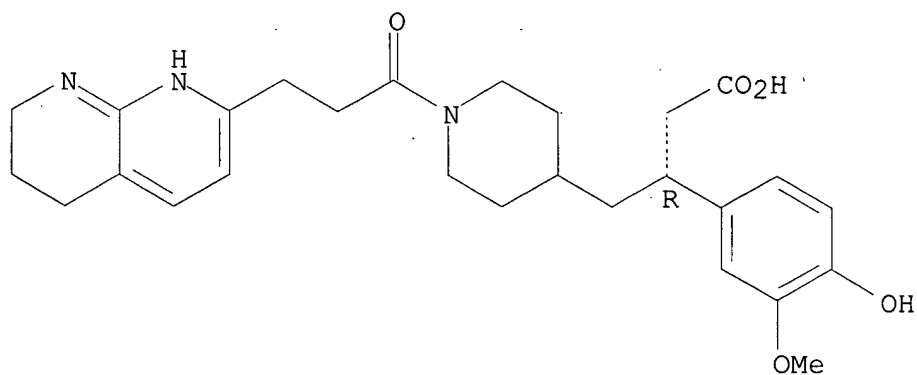


RN 791821-34-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (βR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

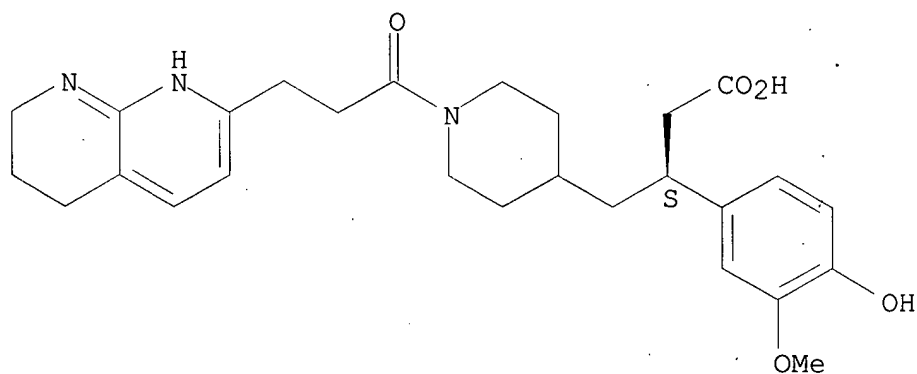
10/782,060



RN 791821-35-7 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (β S)- (9CI) (CA INDEX NAME)

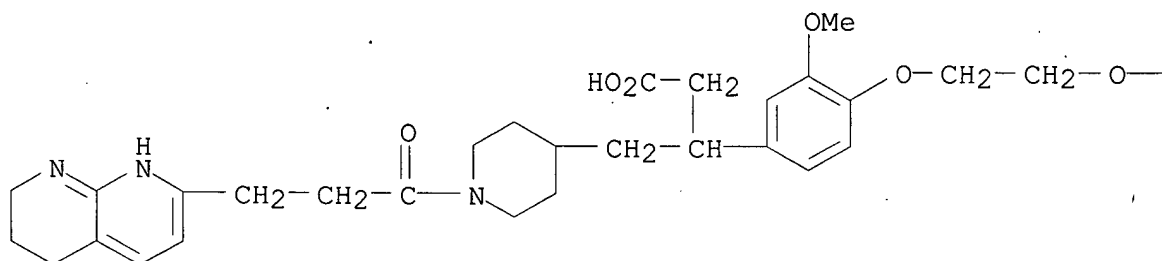
Absolute stereochemistry.



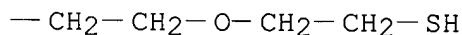
RN 791821-41-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -[4-[2-[2-(2-mercaptoethoxy)ethoxy]ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 669074-97-9P 669075-00-7P 669075-01-8P
 669075-02-9P 669075-03-0P 669075-04-1P
 669075-10-9P 669075-11-0P 669075-12-1P
 669075-17-6P 669075-19-8P 669075-21-2P
 669075-22-3P 669075-24-5P 669075-27-8P
 669075-28-9P 669075-29-0P 669075-30-3P
 669075-31-4P 669075-38-1P 669075-39-2P
 669075-41-6P 669075-48-3P 669075-49-4P
 669075-50-7P 669075-51-8P 669075-52-9P
 669075-53-0P 669075-54-1P 669075-55-2P
 669075-56-3P 669075-57-4P 669075-58-5P
 669075-59-6P 669075-60-9P 669075-61-0P
 669075-62-1P 669075-63-2P 669075-64-3P
 669075-66-5P 669075-67-6P 669075-68-7P
 669075-69-8P 669075-71-2P 669075-80-3P
 669075-81-4P 669075-83-6P 669075-84-7P
 669075-86-9P 669075-93-8P 669076-05-5P
 669076-06-6P 669076-08-8P 669076-38-4P
 669076-45-3P 669076-84-0P 669076-86-2P
 669076-87-3P 791820-70-7P 791820-74-1P
 791820-75-2P 791820-80-9P 791820-81-0P
 791820-82-1P 791820-83-2P 791820-84-3P
 791820-93-4P 791820-94-5P 791820-95-6P
 791820-96-7P 791821-24-4P 791821-38-0P
 791821-43-7P 791821-44-8P 791821-45-9P
 792931-34-1P 792931-35-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidinealkanoic acids as cell targeting compds.

with

selective affinity to $\alpha v \beta 3$, $\alpha v \beta 5$, or

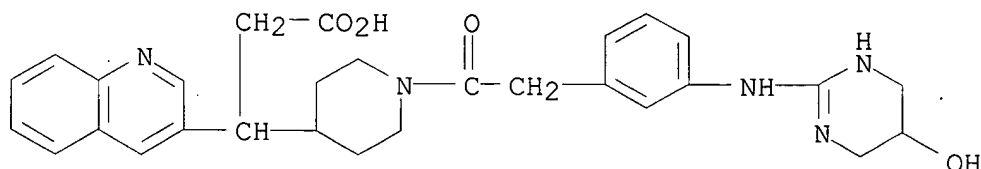
10/782,060

$\alpha\text{v}\beta 6$ integrin receptors for use with imaging agents or liposomes)

RN 669074-97-9 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]phenyl]acetyl]-4-piperidinyl]-, monohydrochloride (9CI)

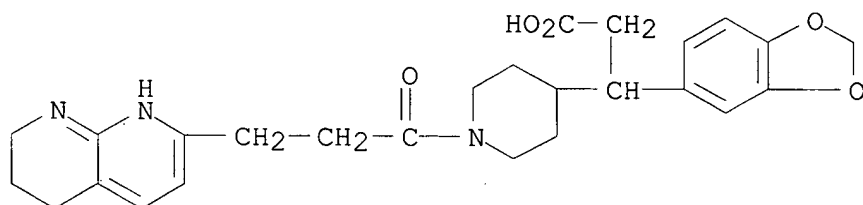
(CA INDEX NAME)



● HCl

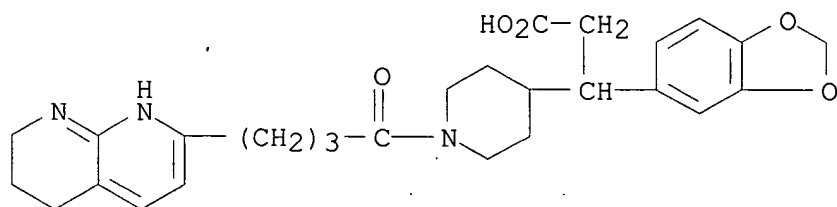
RN 669075-00-7 CAPLUS

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-01-8 CAPLUS

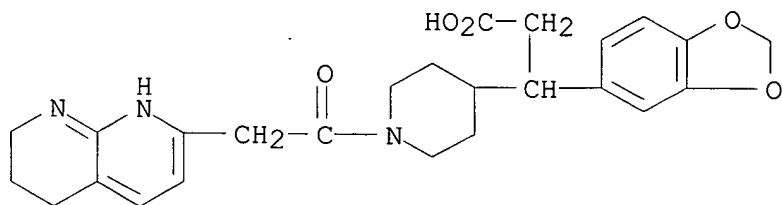
CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



RN 669075-02-9 CAPLUS

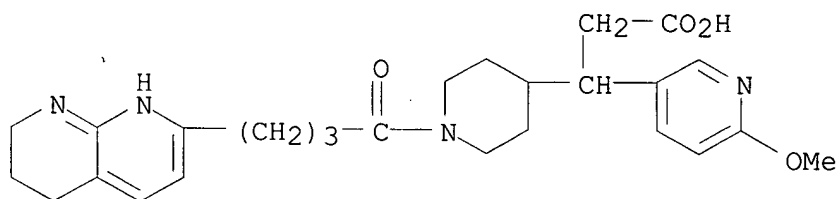
10/782,060

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)



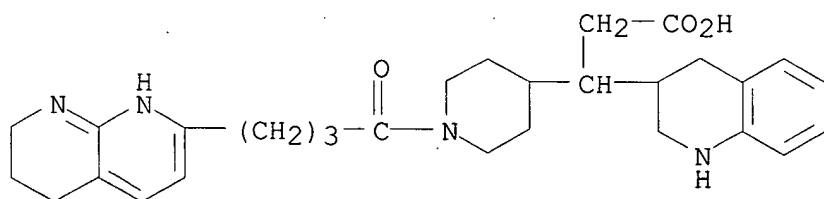
RN 669075-03-0 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 669075-04-1 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

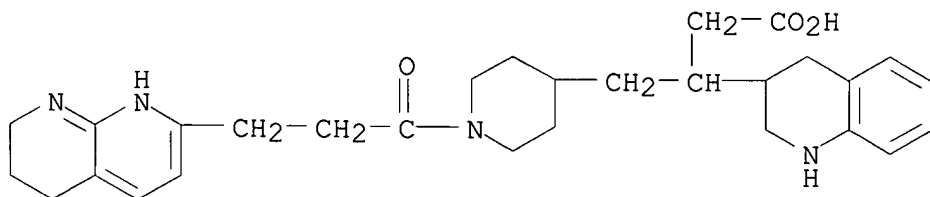


● HCl

RN 669075-10-9 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]- (9CI)
(CA INDEX NAME)

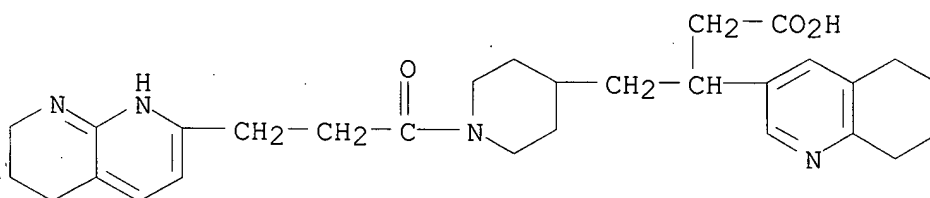
10/782,060



RN 669075-11-0 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

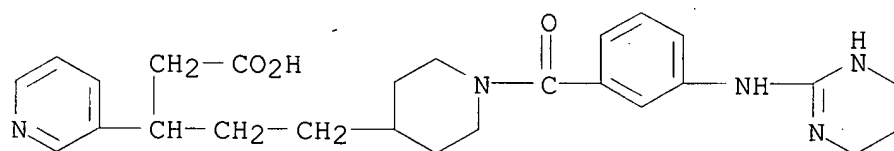
(CA INDEX NAME)



RN 669075-12-1 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI)

(CA INDEX NAME)

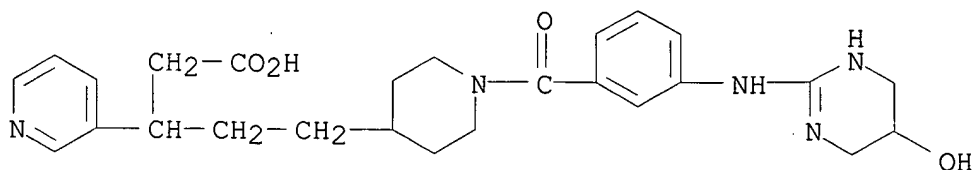


● HCl

RN 669075-17-6 CAPLUS

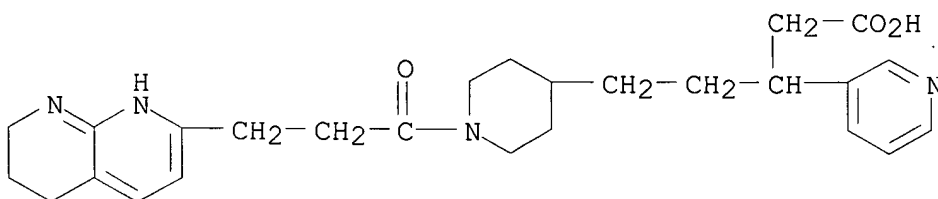
CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

10/782,060



RN 669075-19-8 CAPLUS

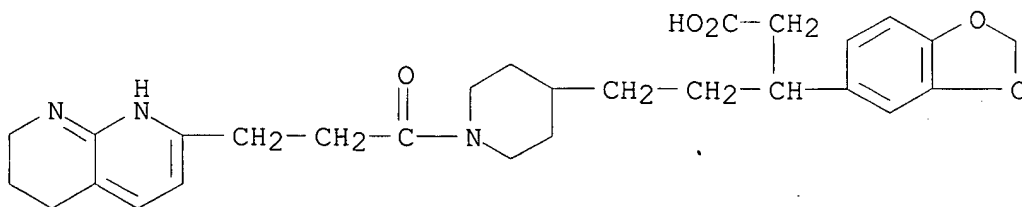
CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI)
(CA INDEX NAME)



● HCl

RN 669075-21-2 CAPLUS

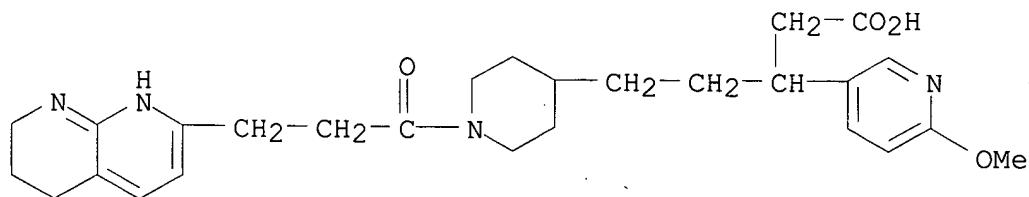
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-22-3 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]- (9CI)
(CA INDEX NAME)

10/782,060



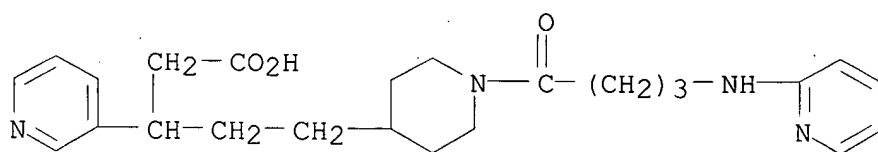
RN 669075-24-5 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 669075-23-4

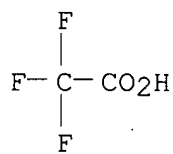
CMF C24 H32 N4 O3



CM 2

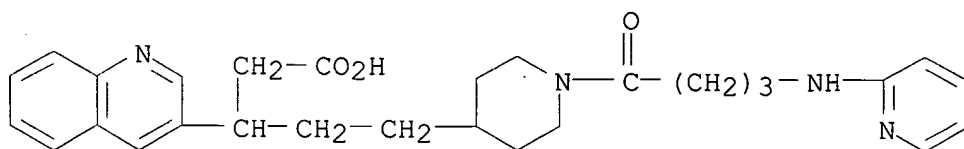
CRN 76-05-1

CMF C2 H F3 O2



RN 669075-27-8 CAPLUS

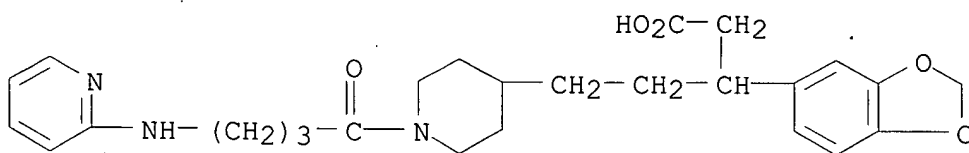
CN 3-Quinolinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



10/782,060

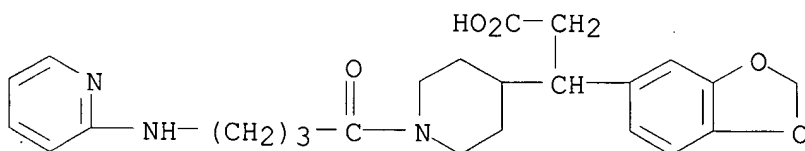
RN 669075-28-9 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(2-pyridinylamino)butyl]- (9CI) (CA INDEX NAME)



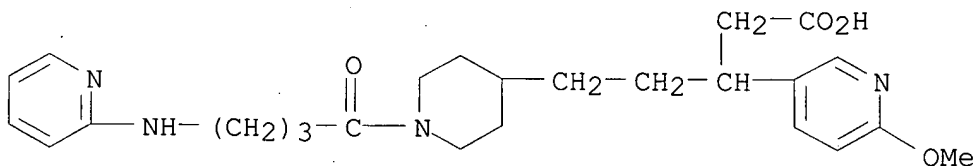
RN 669075-29-0 CAPLUS

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(2-pyridinylamino)butyl]- (9CI) (CA INDEX NAME)



RN 669075-30-3 CAPLUS

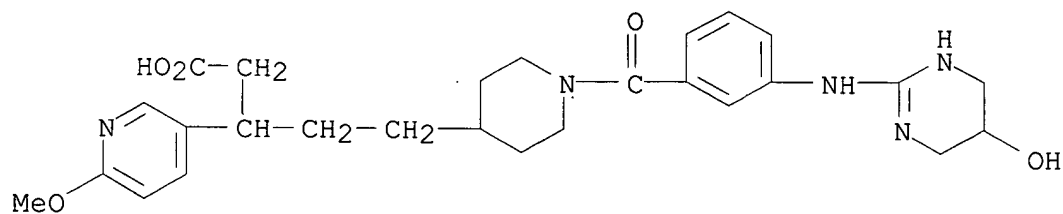
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669075-31-4 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

10/782,060

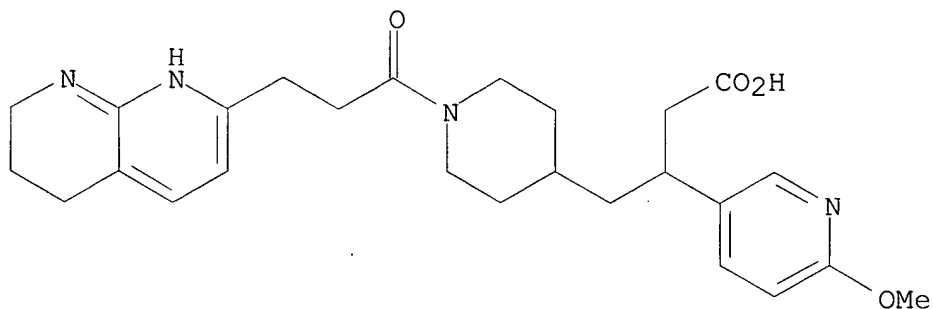


● HCl

RN 669075-38-1 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, (+)-(9CI) (CA INDEX NAME)

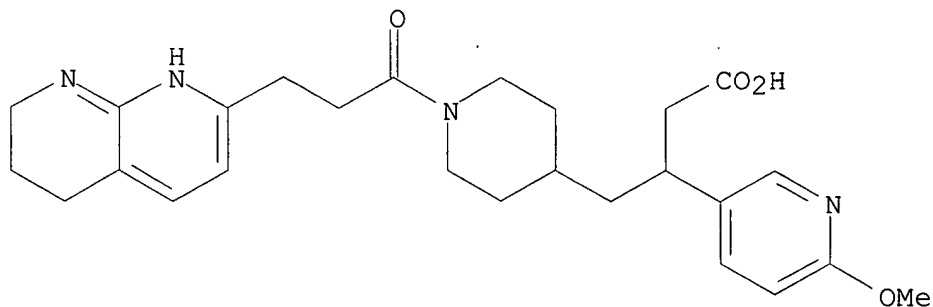
Rotation (+).



RN 669075-39-2 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, (-)-(9CI) (CA INDEX NAME)

Rotation (-).



10/782,060

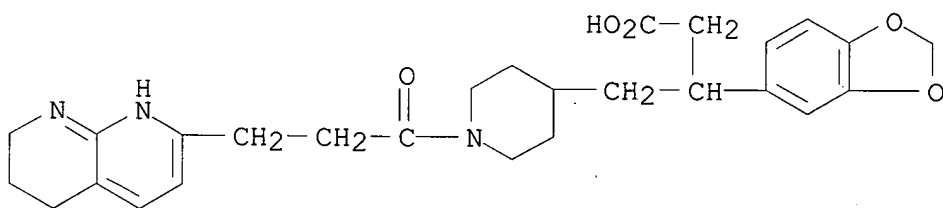
RN 669075-41-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(5,6,7,8-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, mono(trifluoroacetate) (9CI)
(CA INDEX NAME)

CM 1

CRN 669075-40-5

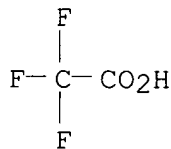
CMF C27 H33 N3 O5



CM 2

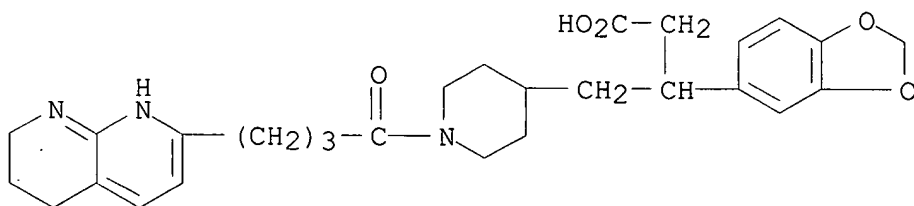
CRN 76-05-1

CMF C2 H F3 O2



RN 669075-48-3 CAPLUS

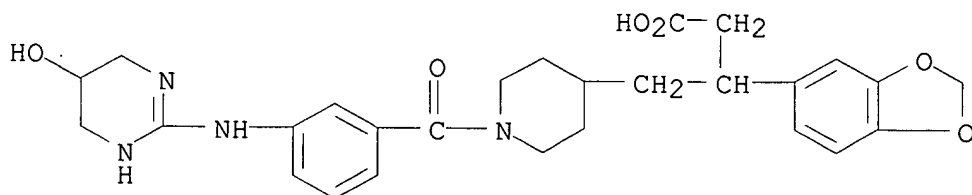
CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



RN 669075-49-4 CAPLUS

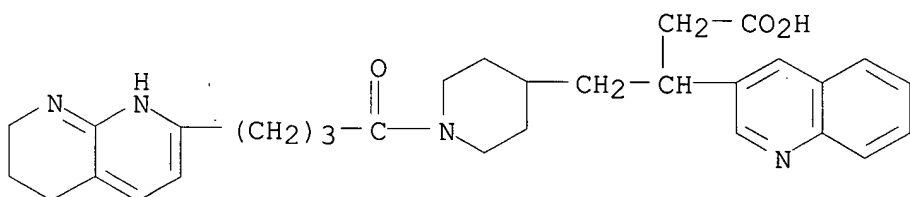
CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)

10/782,060



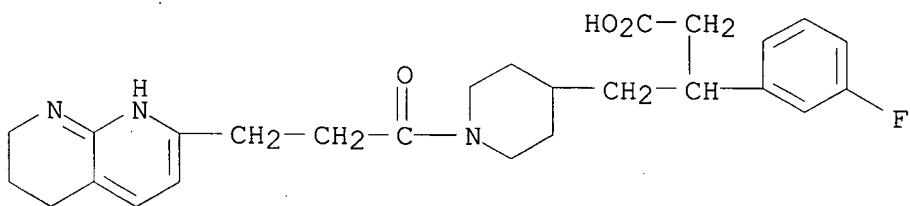
RN 669075-50-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



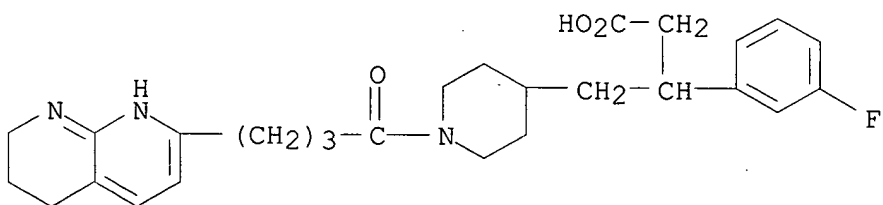
RN 669075-51-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-52-9 CAPLUS

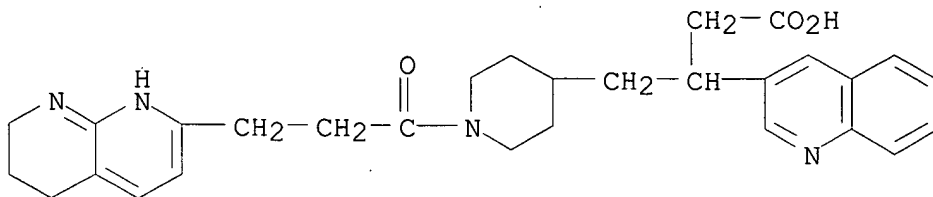
CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



RN 669075-53-0 CAPLUS

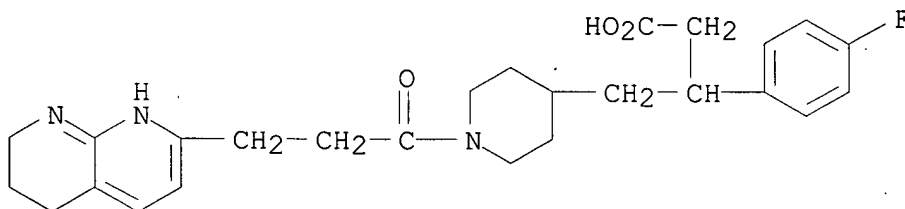
10/782,060

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



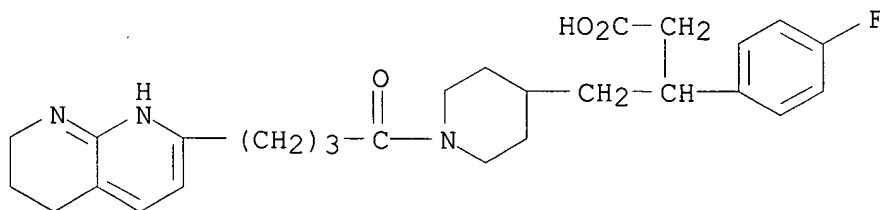
RN 669075-54-1 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-55-2 CAPLUS

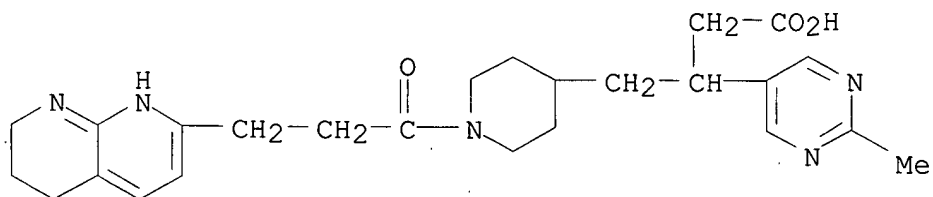
CN 4-Piperidinebutanoic acid, β -(4-fluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



RN 669075-56-3 CAPLUS

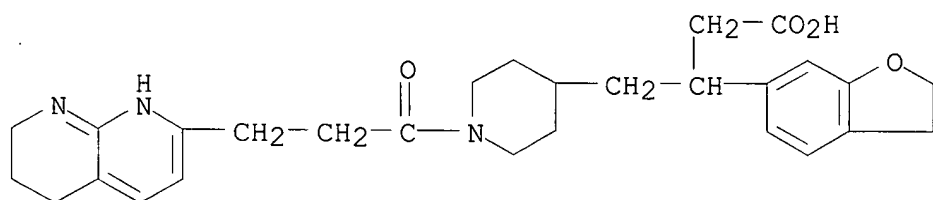
CN 5-Pyrimidinepropanoic acid, 2-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA
INDEX NAME)



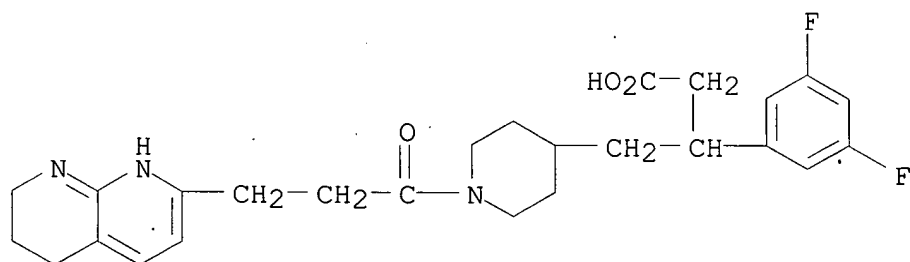
RN 669075-57-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-58-5 CAPLUS

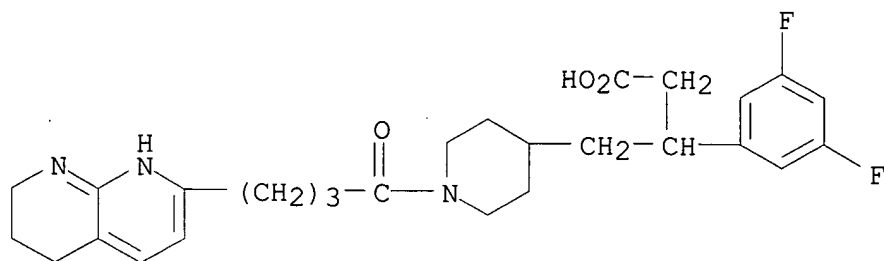
CN 4-Piperidinebutanoic acid, β -(3,5-difluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-59-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3,5-difluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)

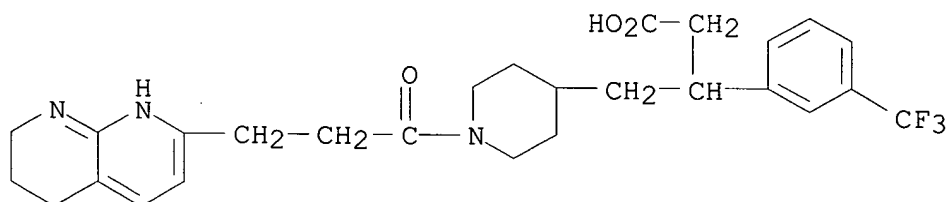
10/782,060



RN 669075-60-9 CAPLUS

CN 4-Piperidinebutanoic acid,

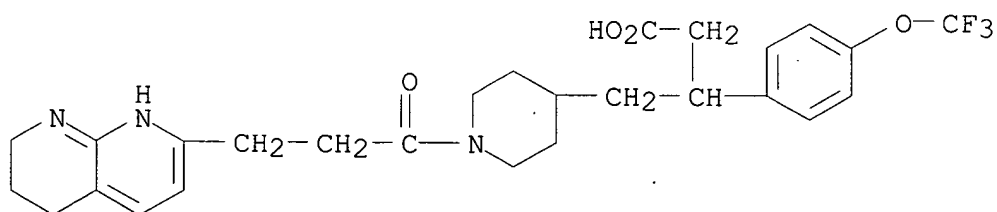
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-β-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 669075-61-0 CAPLUS

CN 4-Piperidinebutanoic acid,

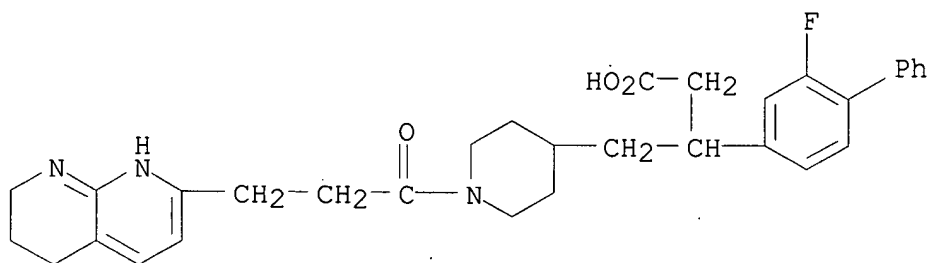
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-β-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 669075-62-1 CAPLUS

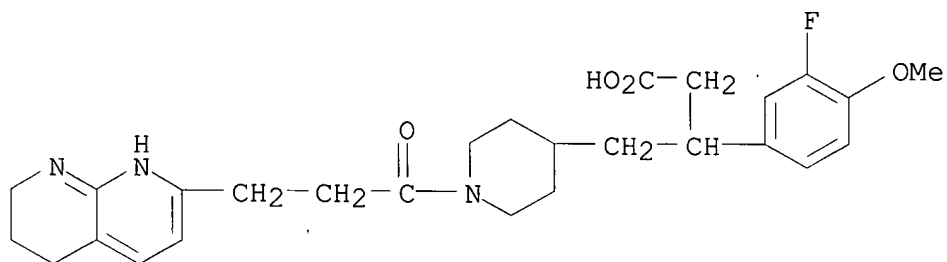
CN 4-Piperidinebutanoic acid, β-(2-fluoro[1,1'-biphenyl]-4-yl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

10/782,060



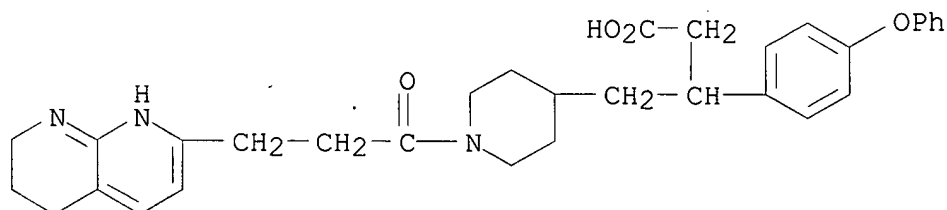
RN 669075-63-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluoro-4-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-64-3 CAPLUS

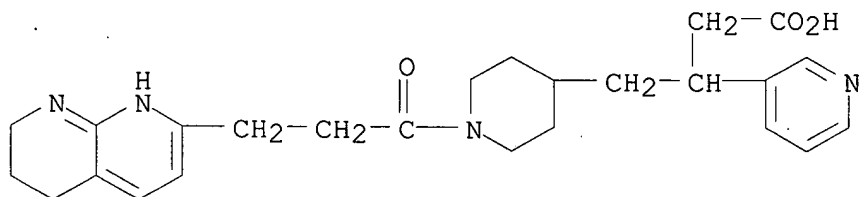
CN 4-Piperidinebutanoic acid, 1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



RN 669075-66-5 CAPLUS

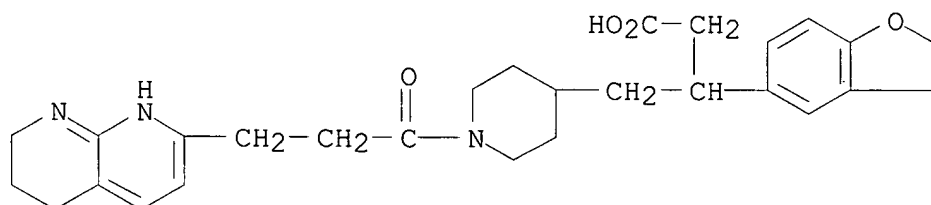
CN 3-Pyridinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]- (9CI) (CA INDEX NAME)

10/782,060



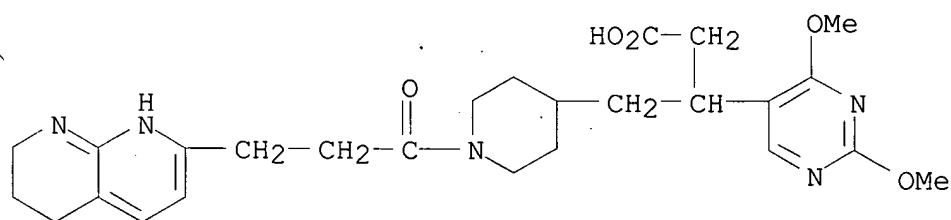
RN 669075-67-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-68-7 CAPLUS

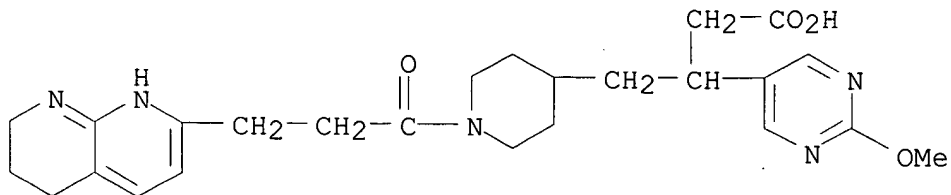
CN 5-Pyrimidinepropanoic acid, 2,4-dimethoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669075-69-8 CAPLUS

CN 5-Pyrimidinepropanoic acid, 2-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

10/782,060



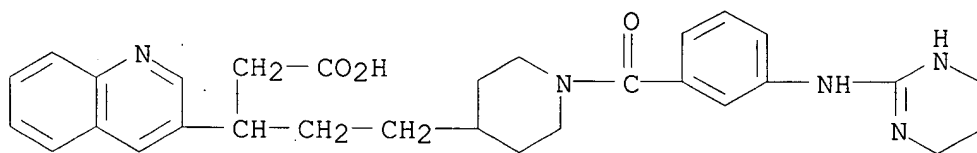
RN 669075-71-2 CAPLUS

CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, mono(trifluoroacetate)
(9CI) (CA INDEX NAME)

CM 1

CRN 669075-70-1

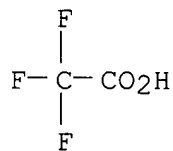
CMF C30 H35 N5 O3



CM 2

CRN 76-05-1

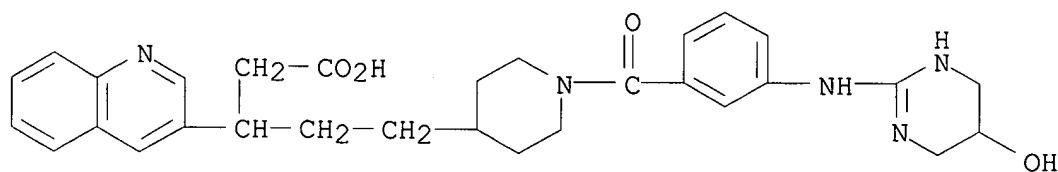
CMF C2 H F3 O2



RN 669075-80-3 CAPLUS

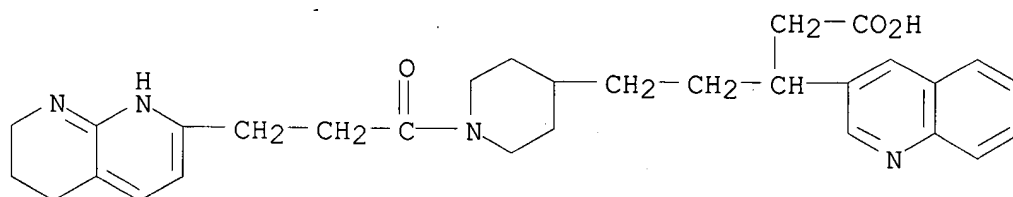
CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

10/782,060



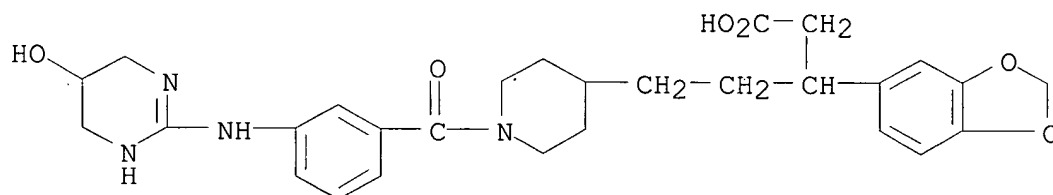
RN 669075-81-4 CAPLUS

CN 3-Quinolinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]ethyl]- (9CI) (CA INDEX NAME)



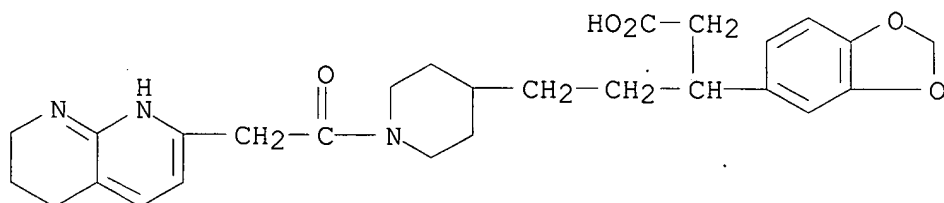
RN 669075-83-6 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 669075-84-7 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)



RN 669075-86-9 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-

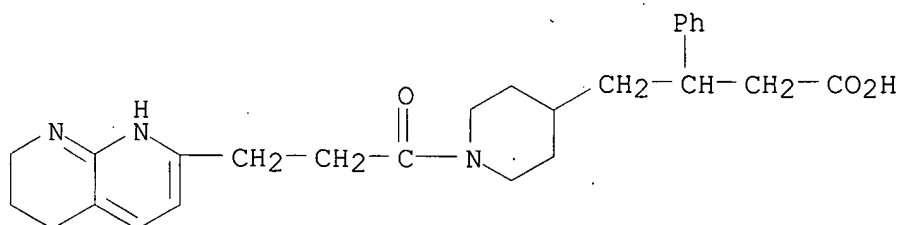
10/782,060

2-yl)propyl]- β -phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 669075-85-8

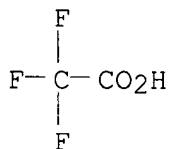
CMF C26 H33 N3 O3



CM 2

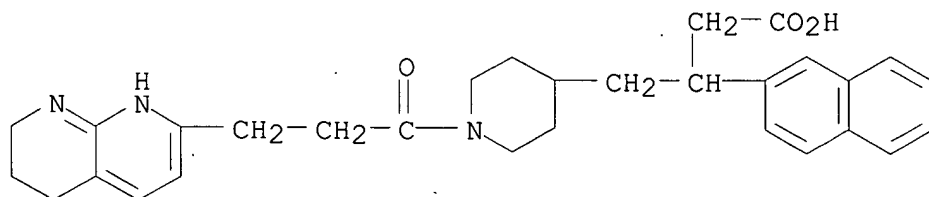
CRN 76-05-1

CMF C2 H F3 O2



RN 669075-93-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



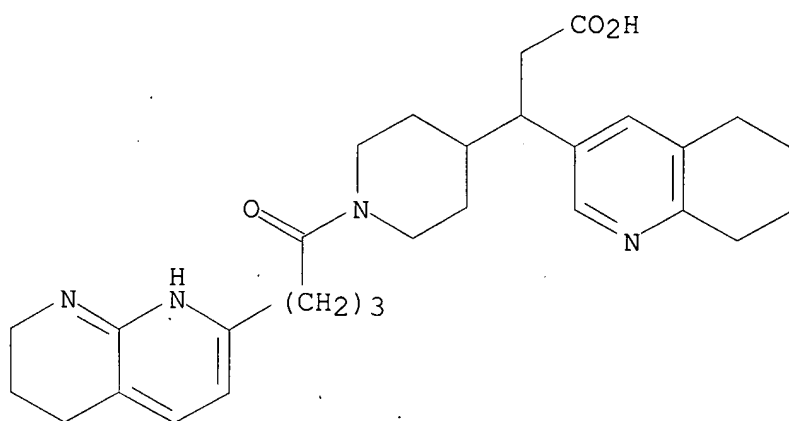
RN 669076-05-5 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, (+)- (9CI)

(CA INDEX NAME)

Rotation (+).

10/782,060



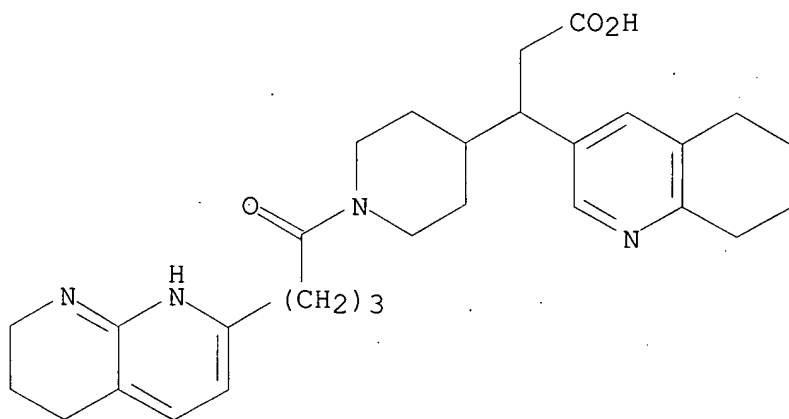
RN 669076-06-6 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, (-)-(9CI)

(CA

INDEX NAME)

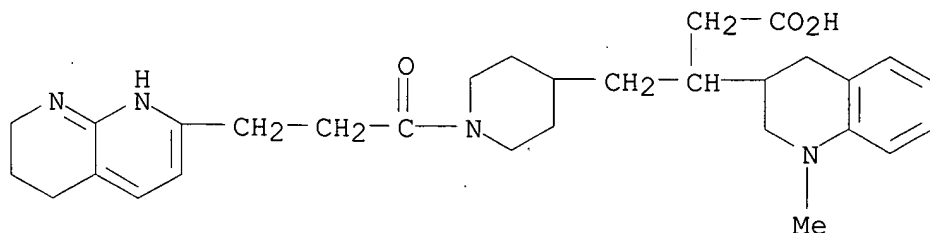
Rotation (-).



RN 669076-08-8 CAPLUS

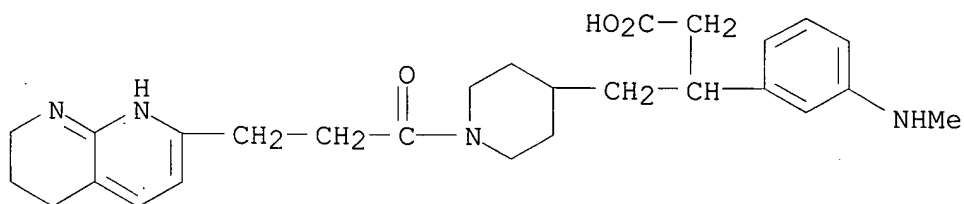
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-1-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

10/782,060



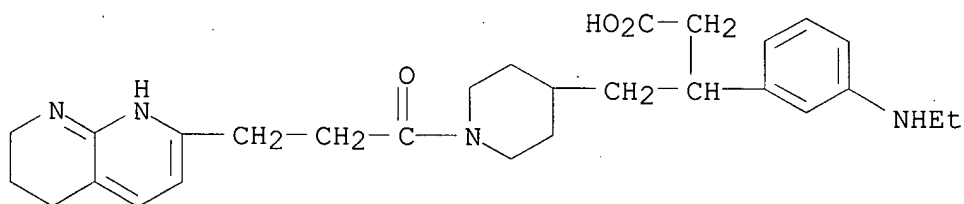
RN 669076-38-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -[3-(methylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669076-45-3 CAPLUS

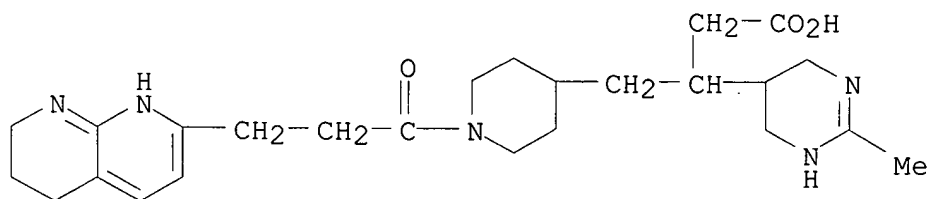
CN 4-Piperidinebutanoic acid, β -[3-(ethylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669076-84-0 CAPLUS

CN 5-Pyrimidinepropanoic acid, 1,4,5,6-tetrahydro-2-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

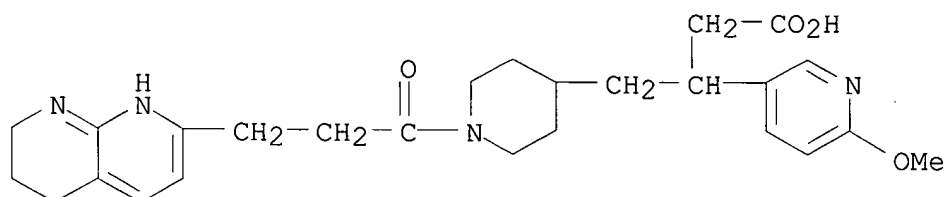
10/782,060



RN 669076-86-2 CAPLUS

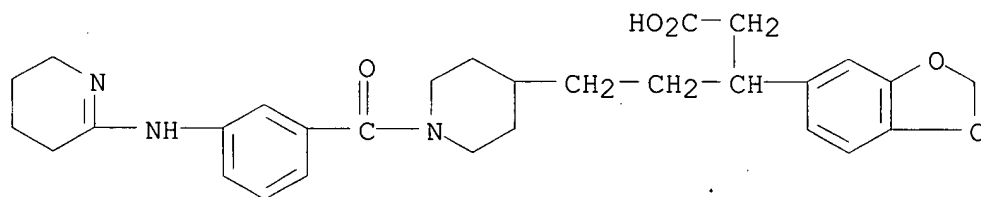
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA INDEX NAME)



RN 669076-87-3 CAPLUS

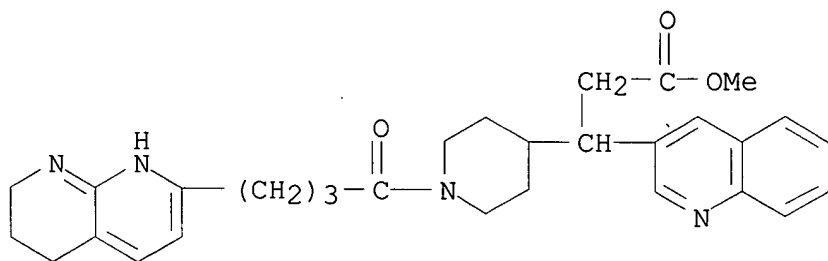
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(3,4,5,6-tetrahydro-2-pyridinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 791820-70-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester, hydrochloride (2:7) (9CI) (CA INDEX NAME)

10/782,060

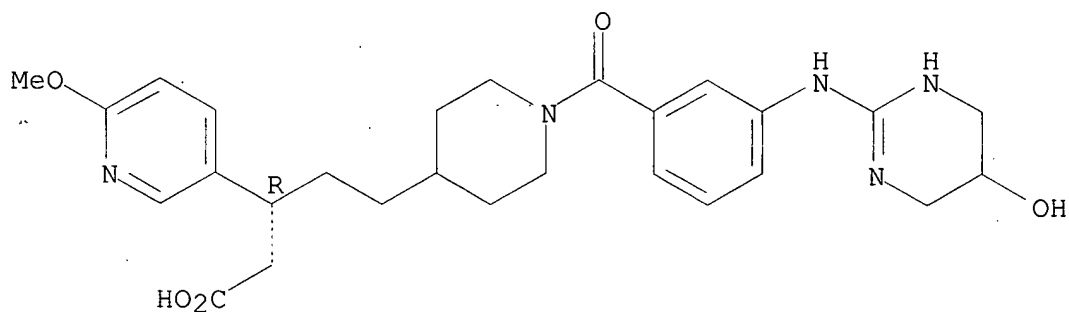


● 7/2 HCl

RN 791820-74-1 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride, (β R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



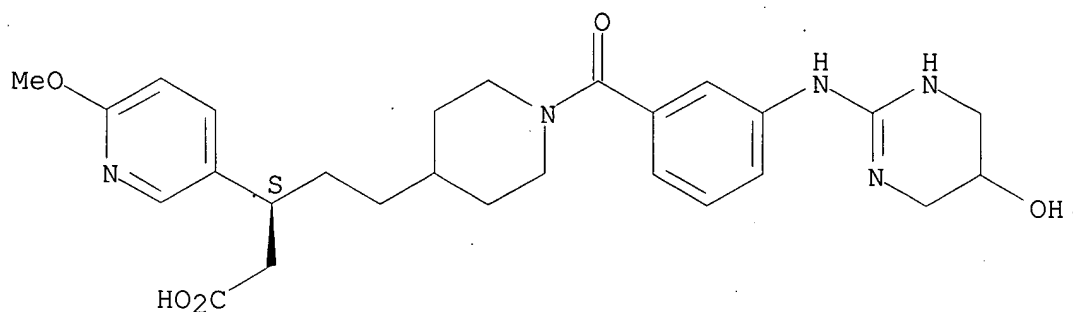
● HCl

RN 791820-75-2 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride, (β S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

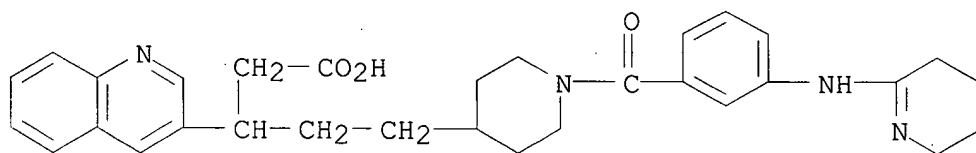
10/782,060



● HCl

RN 791820-80-9 CAPLUS

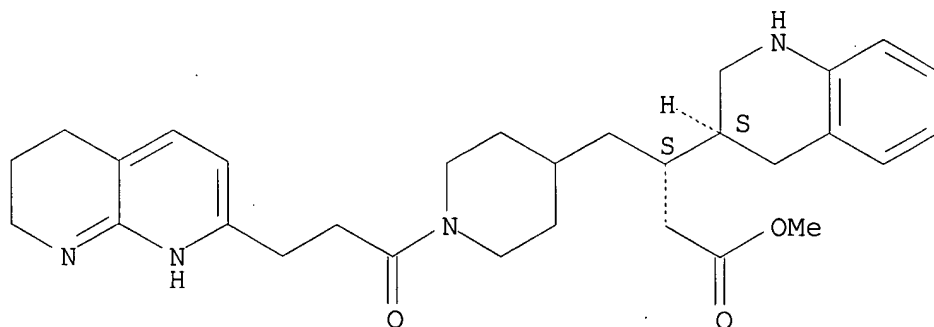
CN. 3-Quinolinepropanoic acid, β -[2-[1-[3-[(3,4,5,6-tetrahydro-2-pyridinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 791820-81-0 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester, (β S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



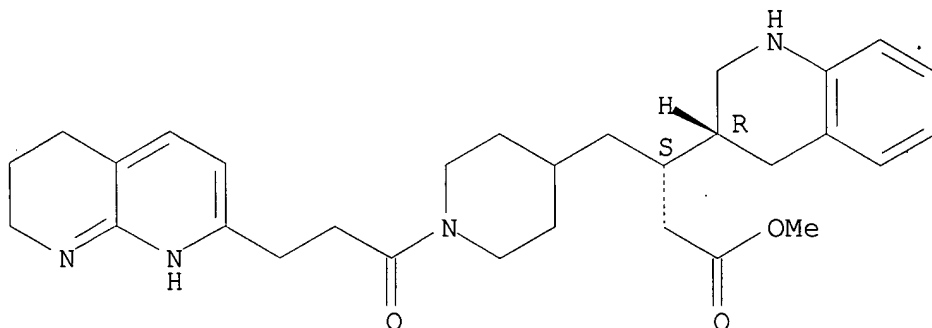
RN 791820-82-1 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester, (β S,3S)- (9CI) (CA INDEX NAME)

10/782,060

ester, (β S,3R)- (9CI) (CA INDEX NAME)

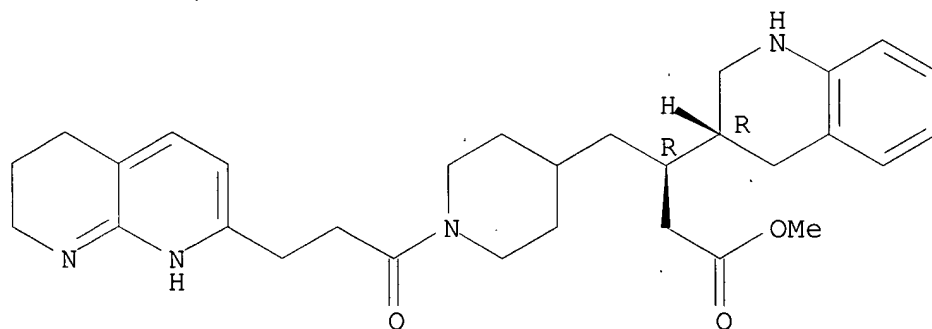
Absolute stereochemistry.



RN 791820-83-2 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester, (β R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

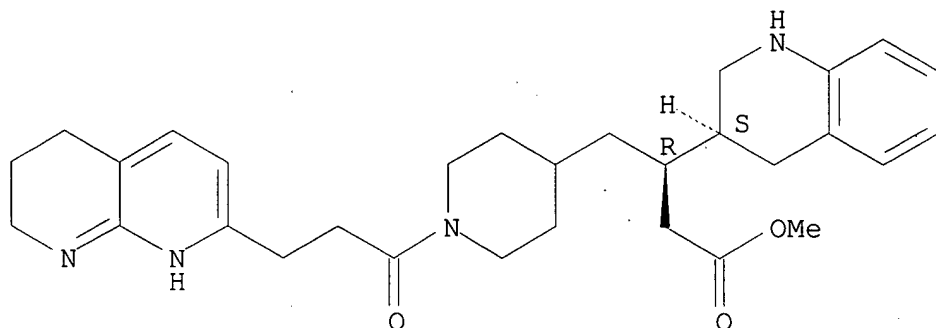


RN 791820-84-3 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester, (β R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

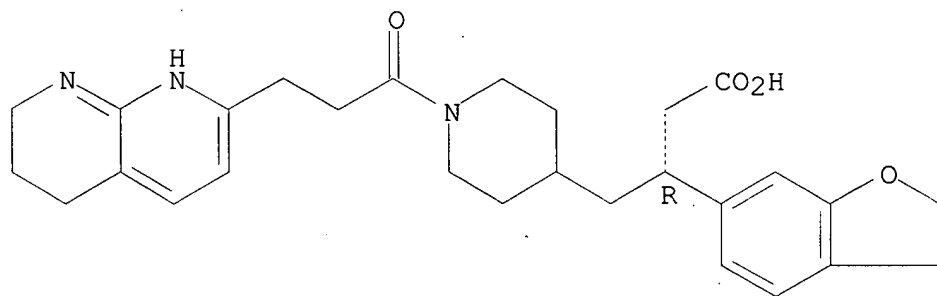
10/782,060



RN 791820-93-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 791820-94-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (β R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

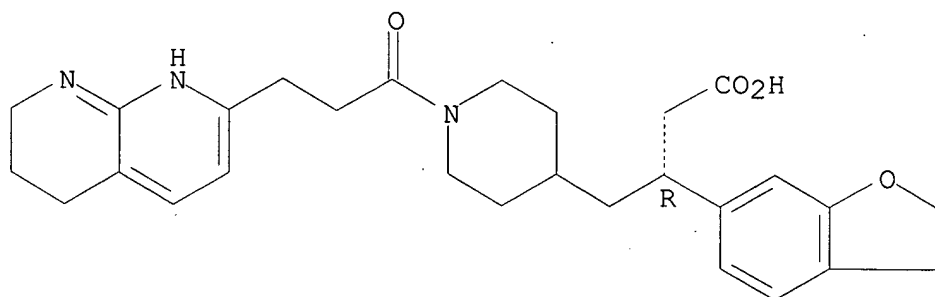
CM 1

CRN 791820-93-4

CMF C28 H35 N3 O4

Absolute stereochemistry.

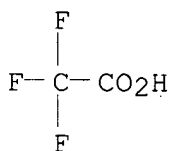
10/782,060



CM 2

CRN 76-05-1

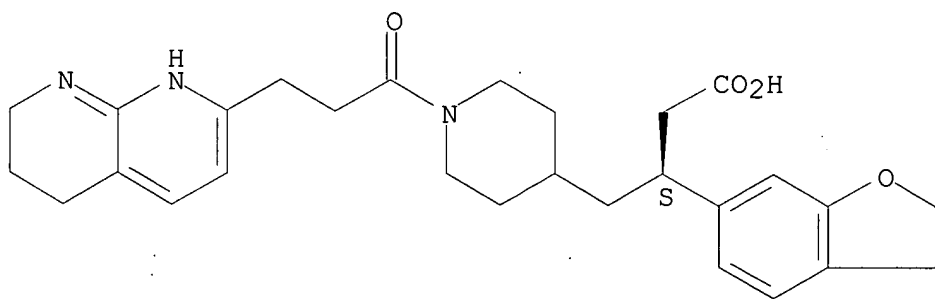
CMF C2 H F3 O2



RN 791820-95-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 791820-96-7 CAPLUS

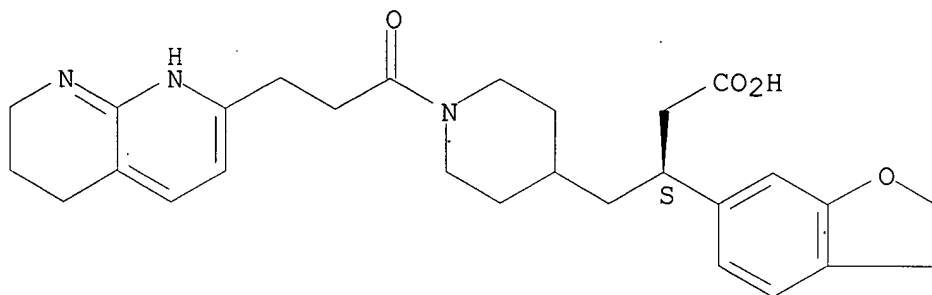
CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (β S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

10/782,060

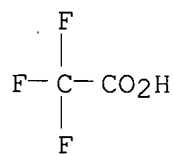
CRN 791820-95-6
CMF C28 H35 N3 O4

Absolute stereochemistry.

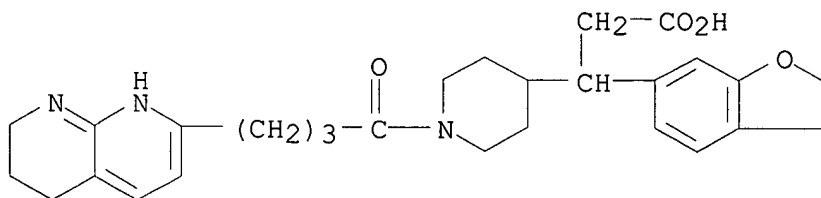


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 791821-24-4 CAPLUS
CN 4-Piperidinepropanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-, monohydrochloride
(9CI)
(CA INDEX NAME)



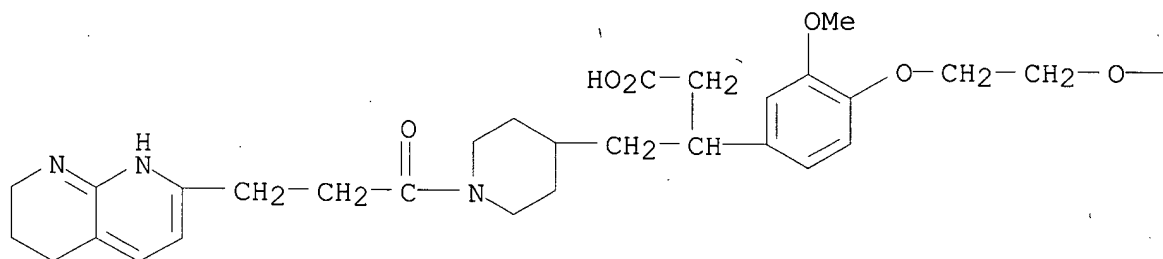
● HCl

10/782,060

RN 791821-38-0 CAPLUS

CN 4-Piperidinebutanoic acid, β -[4-[2-(2-mercaptoethoxy)ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—CH₂—CH₂—SH

RN 791821-43-7 CAPLUS

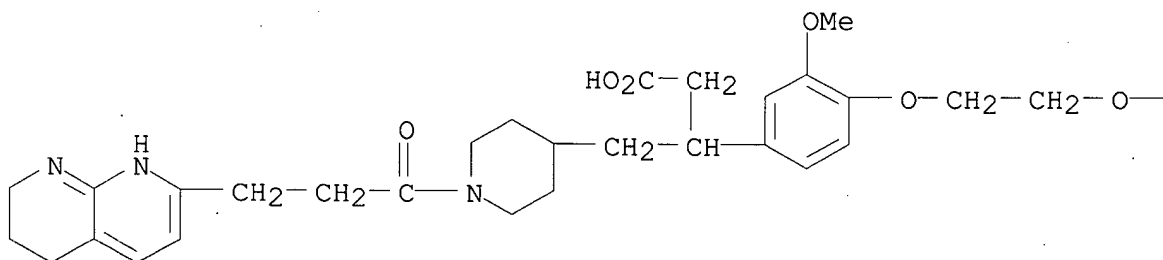
CN Poly(oxy-1,2-ethanediyl), α -[2-[3-[[2-[2-[2-[4-[1-(carboxymethyl)-2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-

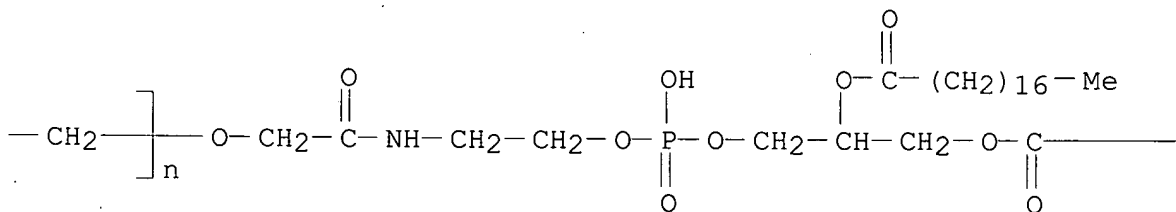
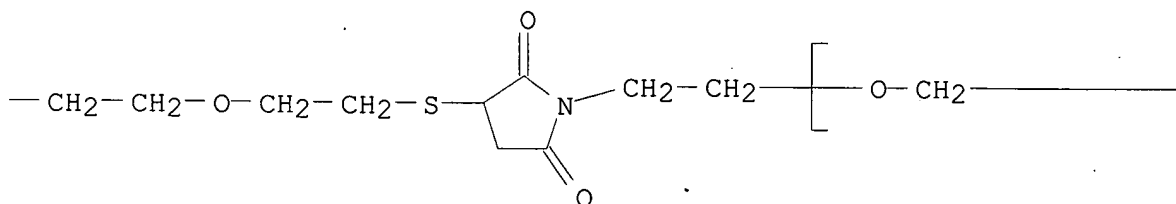
piperidinyl]ethyl]-2-methoxyphenoxy]ethoxy]ethoxy]ethyl]thio]-2,5-dioxo-1-pyrrolidinyl]ethyl]- ω -[[7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxooctadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphatriacont-1-yl]oxy]-

(9CI)

(CA INDEX NAME)

PAGE 1-A





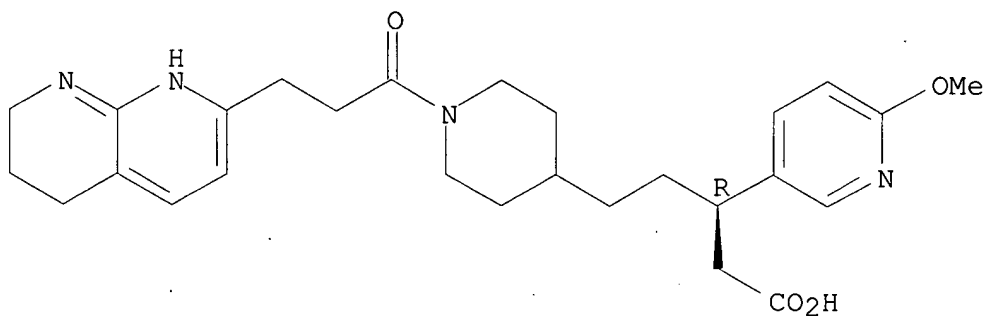
--- (CH₂)₁₆---Me

RN 791821-44-8 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy-β-[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]-, (βR)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

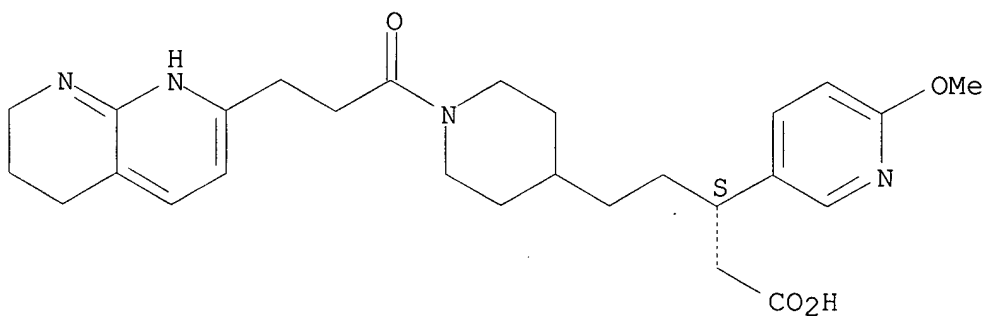
10/782,060



RN 791821-45-9 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyloxyethyl]-, (β S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

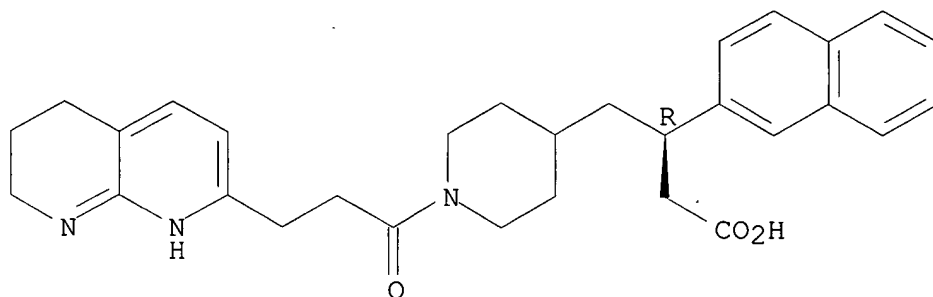


RN 792931-34-1 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, monohydrochloride, (β R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/782,060

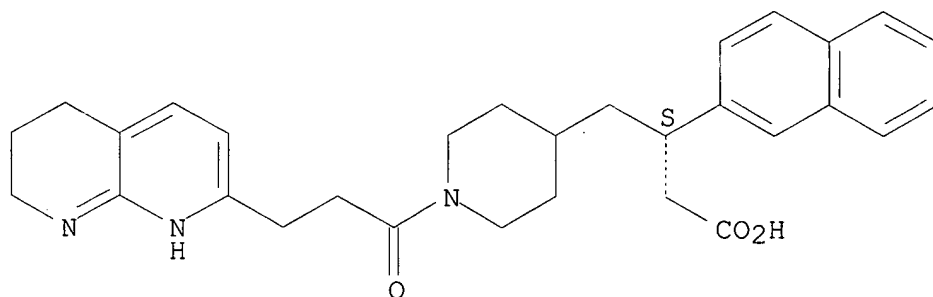


● HCl

RN 792931-35-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, monohydrochloride, (β S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IT 669075-36-9P 669075-37-0P 669076-50-0P
669076-51-1P 791820-86-5P 791820-87-6P
791820-88-7P 791820-89-8P 791821-00-6P
791821-01-7P 791821-25-5P 791821-26-6P

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of piperidinealkanoic acids as cell targeting compds.)

with

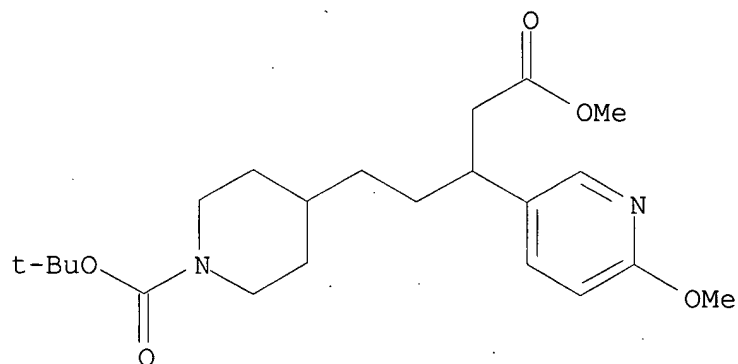
selective affinity to $\alpha v\beta 3$, $\alpha v\beta 5$, or
 $\alpha v\beta 6$ integrin receptors for use with imaging agents or
liposomes)

RN 669075-36-9 CAPLUS

10/782,060

CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-6-methoxy-, methyl ester, (+)- (9CI) (CA INDEX NAME)

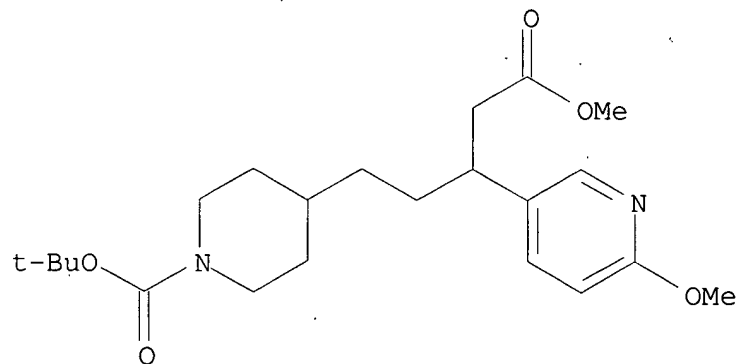
Rotation (+).



RN 669075-37-0 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-6-methoxy-, methyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

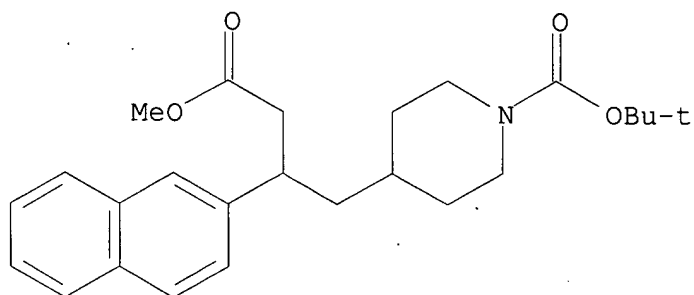


RN 669076-50-0 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -2-naphthalenyl-, methyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

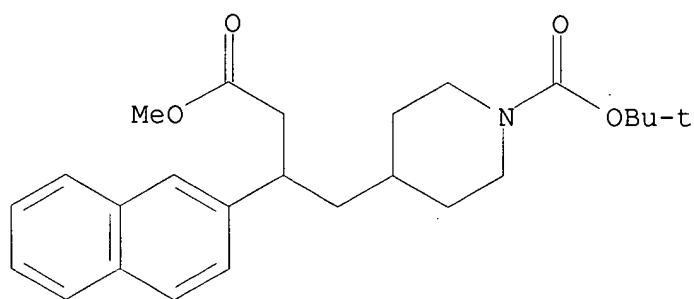
10/782,060



RN 669076-51-1 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -2-naphthalenyl-, methyl ester, (-)- (9CI) (CA INDEX NAME)

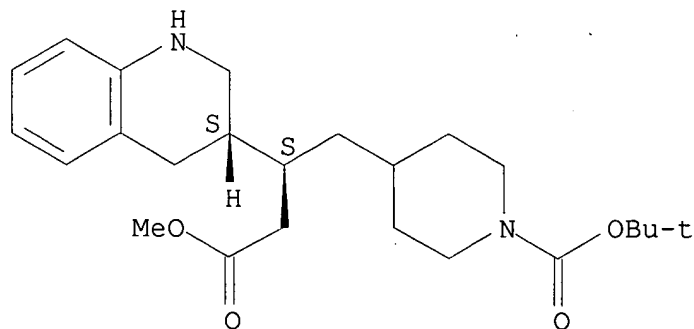
Rotation (-).



RN 791820-86-5 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, methyl ester, (β S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

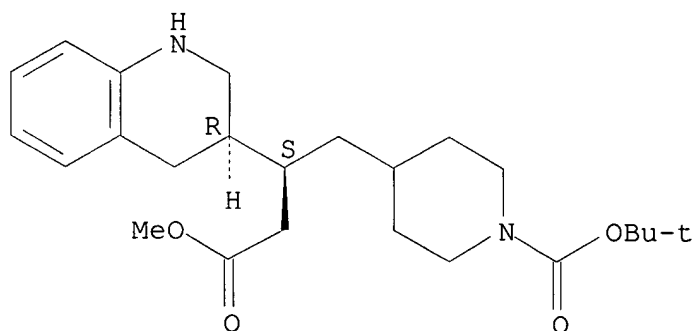


RN 791820-87-6 CAPLUS

10/782,060

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl)methyl]-1,2,3,4-tetrahydro-, methyl ester, (β S,3R)- (9CI)
(CA INDEX NAME)

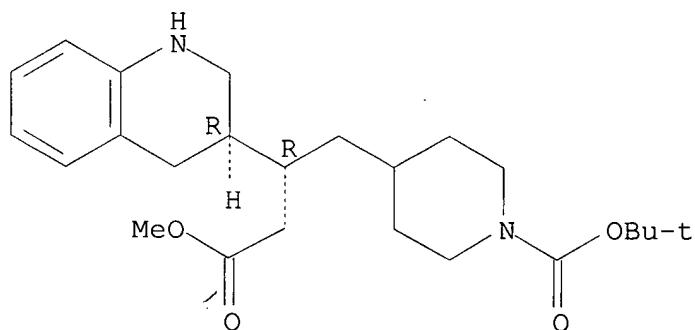
Absolute stereochemistry.



RN 791820-88-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl)methyl]-1,2,3,4-tetrahydro-, methyl ester, (β R,3R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

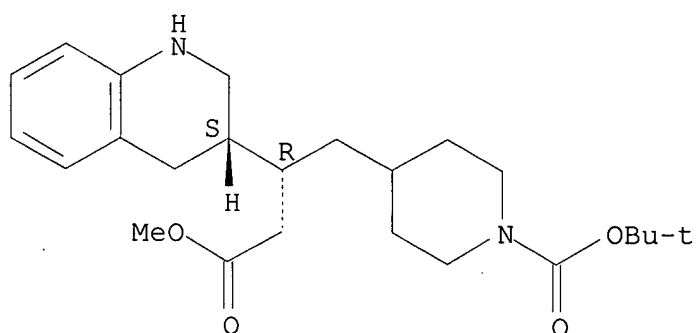


RN 791820-89-8 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl)methyl]-1,2,3,4-tetrahydro-, methyl ester, (β R,3S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

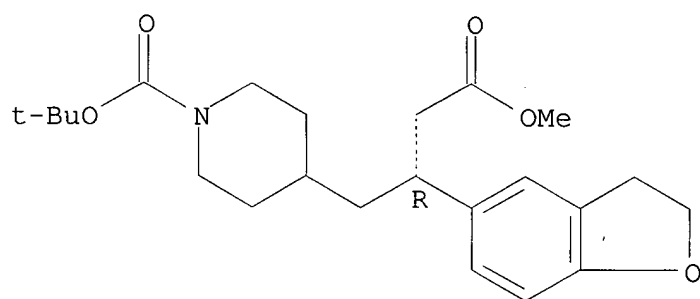
10/782,060



RN 791821-00-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester, (β R)- (9CI) (CA INDEX NAME)

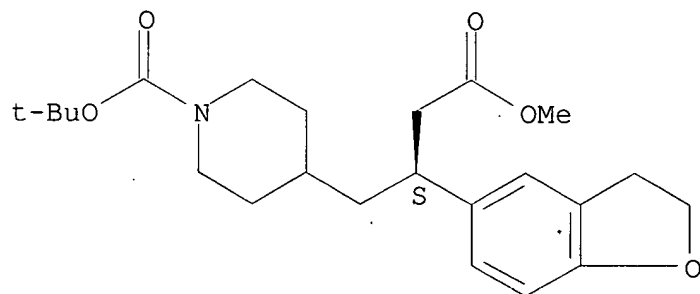
Absolute stereochemistry.



RN 791821-01-7 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



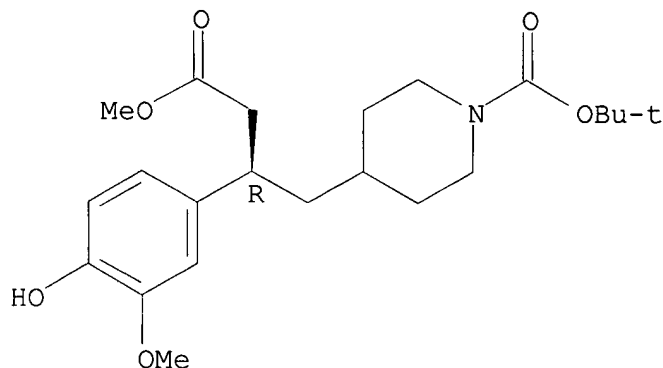
RN 791821-25-5 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(4-

10/782,060

hydroxy-3-methoxyphenyl)-, methyl ester, (β R)- (9CI) (CA INDEX NAME)

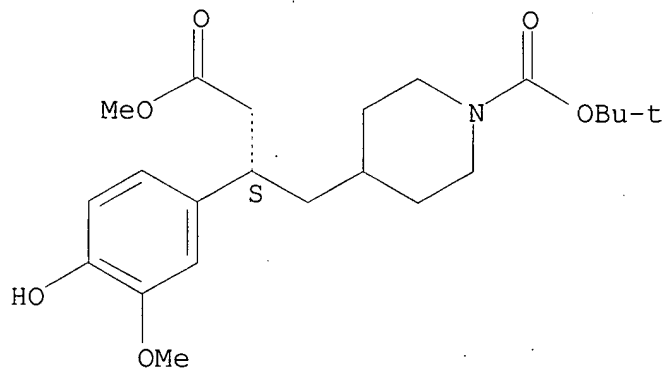
Absolute stereochemistry.



RN 791821-26-6 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(4-hydroxy-3-methoxyphenyl)-, methyl ester, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 669074-91-3P 669074-96-8P 669074-99-1P
669075-05-2P 669075-06-3P 669075-08-5P
669075-14-3P 669075-16-5P 669075-18-7P
669075-20-1P 669075-26-7P 669075-33-6P
669075-35-8P 669075-44-9P 669075-47-2P
669075-79-0P 669075-88-1P 669075-92-7P
669075-96-1P 669076-07-7P 669076-34-0P
669076-41-9P 669076-44-2P 669076-49-7P
791820-73-0P 791820-76-3P 791820-77-4P
791820-85-4P 791820-91-2P 791820-92-3P
791820-99-0P 791821-06-2P 791821-07-3P
791821-19-7P 791821-20-0P 791821-32-4P
791821-33-5P 791821-36-8P 791821-37-9P
791821-39-1P 791821-40-4P

10/782,060

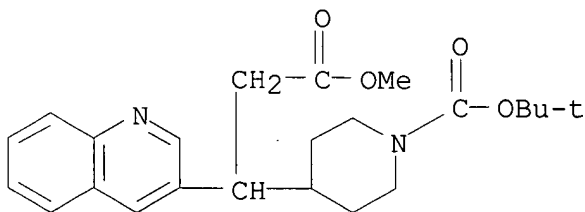
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)

(preparation of piperidinealkanoic acids as cell targeting compds.
with

selective affinity to $\alpha\text{v}\beta 3$, $\alpha\text{v}\beta 5$, or
 $\alpha\text{v}\beta 6$ integrin receptors for use with imaging agents or
liposomes)

RN 669074-91-3 CAPLUS

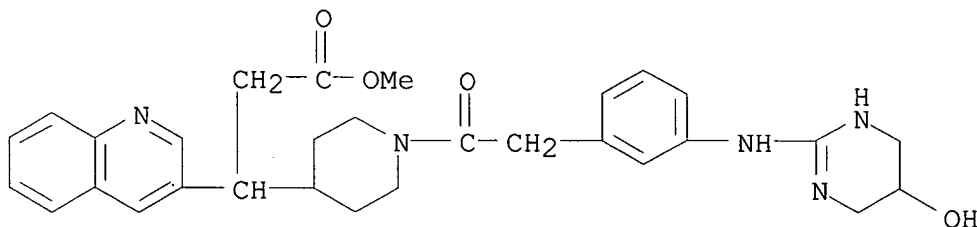
CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-
piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669074-96-8 CAPLUS

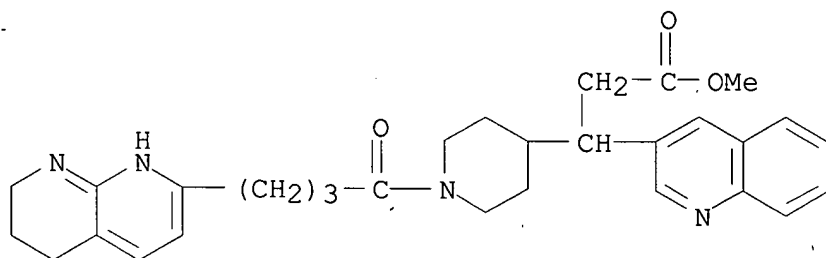
CN 3-Quinolinepropanoic acid, β -[1-[[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-
pyrimidinyl)amino]phenyl]acetyl]-4-piperidinyl]-, methyl ester (9CI)

(CA
INDEX NAME)

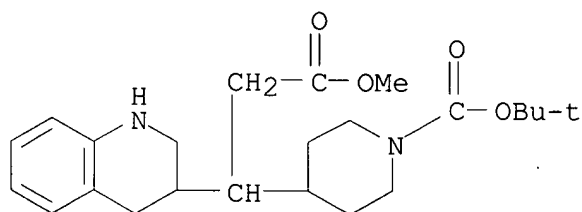


RN 669074-99-1 CAPLUS

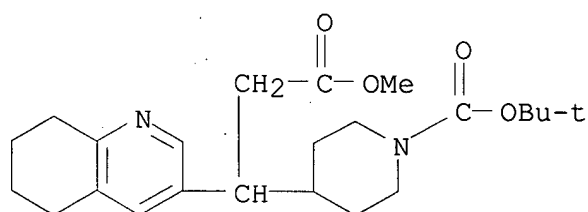
CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-
naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX
NAME)



RN 669075-05-2 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-1,2,3,4-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)

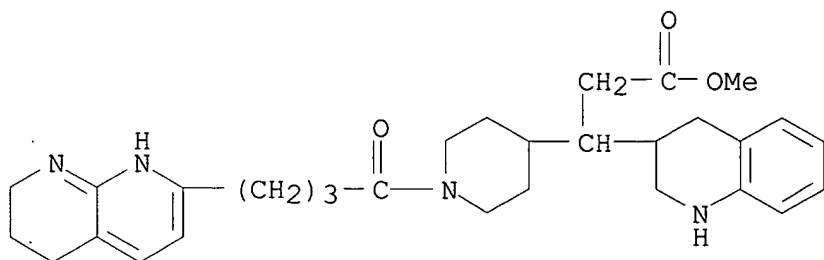
RN 669075-06-3 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)

RN 669075-08-5 CAPLUS

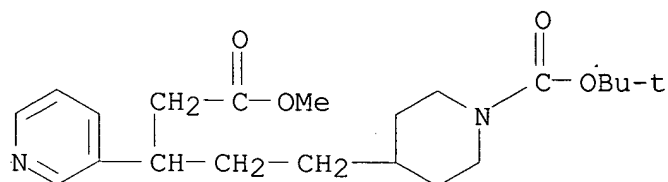
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



RN 669075-14-3 CAPLUS

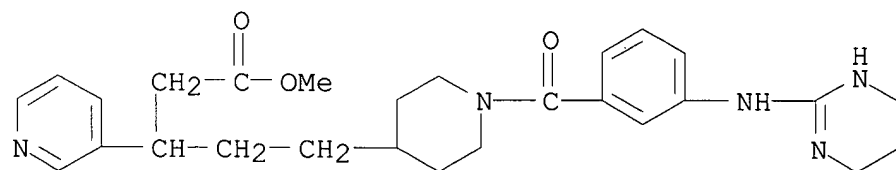
CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-16-5 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidiny]ethyl]-, methyl ester (9CI)

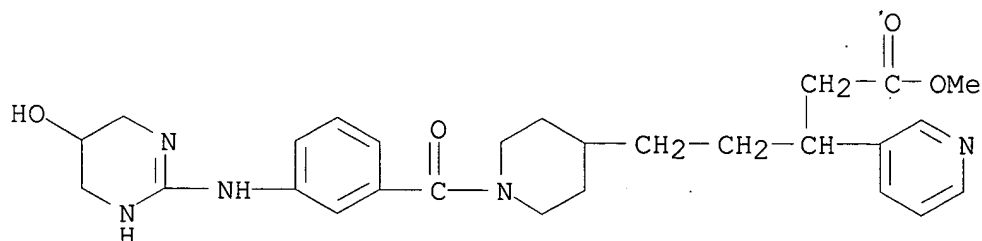
(CA INDEX NAME)



RN 669075-18-7 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidiny]ethyl]-, methyl ester (9CI)

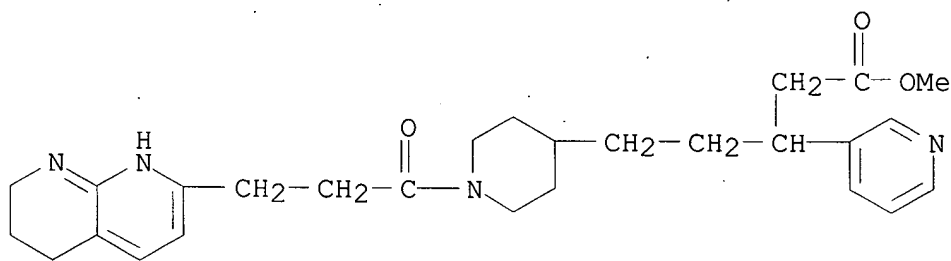
(CA INDEX NAME)



RN 669075-20-1 CAPLUS

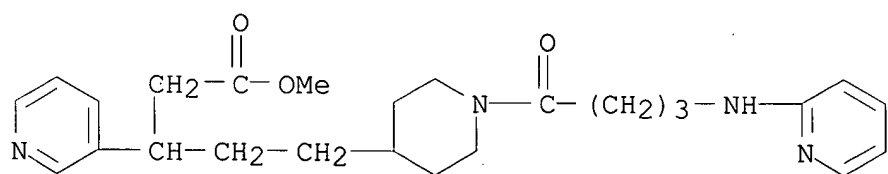
CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)

(CA INDEX NAME)



RN 669075-26-7 CAPLUS

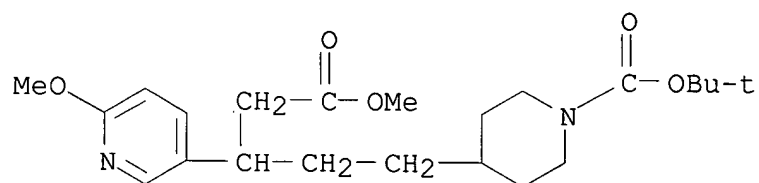
CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-33-6 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-6-methoxy-, methyl ester (9CI) (CA INDEX NAME)

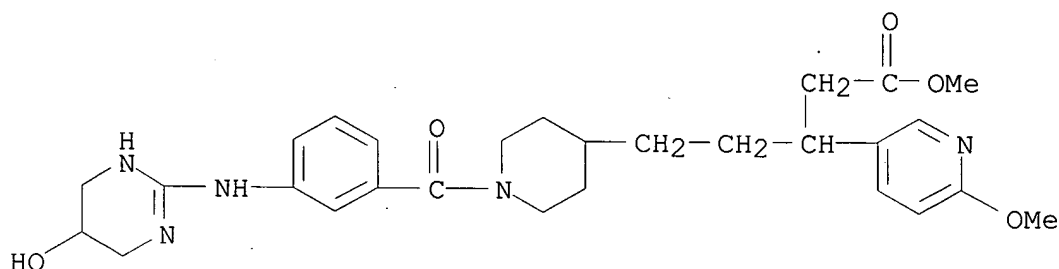
10/782,060



RN 669075-35-8 CAPLUS

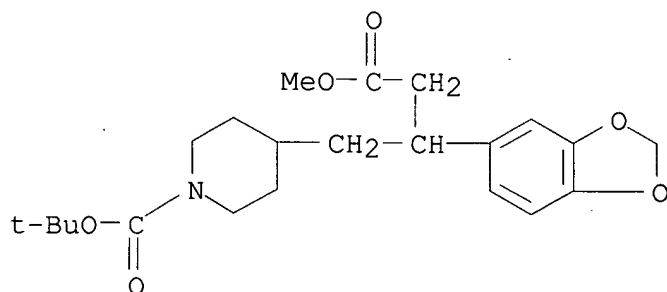
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester

(9CI) (CA INDEX NAME)



RN 669075-44-9 CAPLUS .

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

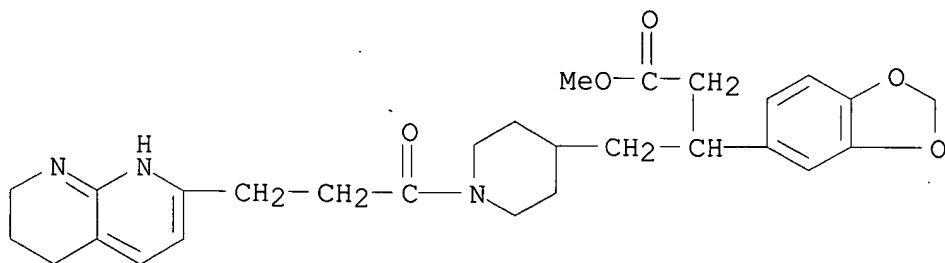


RN 669075-47-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA

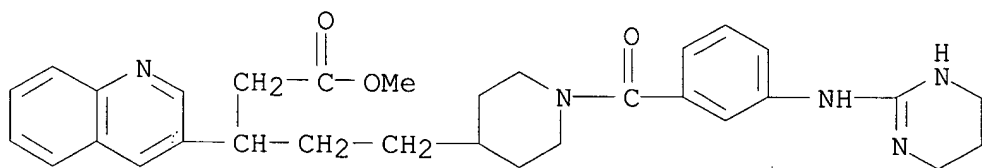
INDEX
NAME)

10/782,060



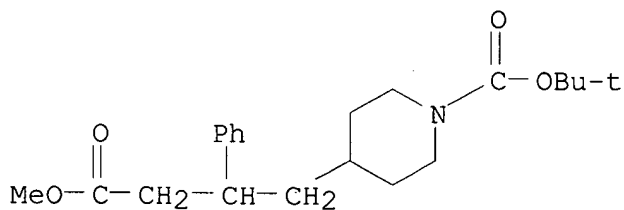
RN 669075-79-0 CAPLUS

CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 669075-88-1 CAPLUS

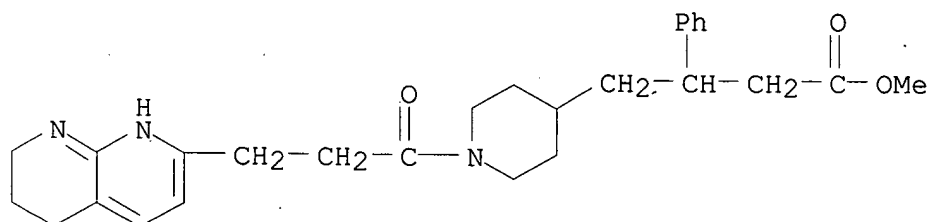
CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-92-7 CAPLUS

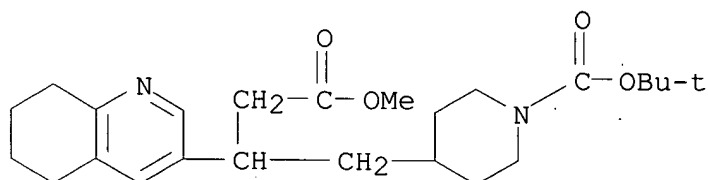
CN 4-Piperidinebutanoic acid, 1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -phenyl-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



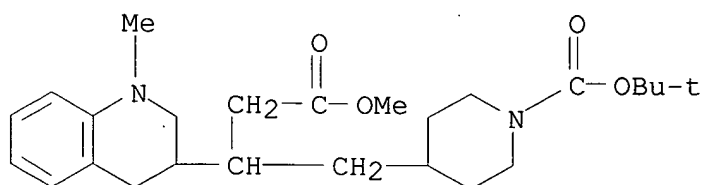
RN 669075-96-1 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny]methyl]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)



RN 669076-07-7 CAPLUS

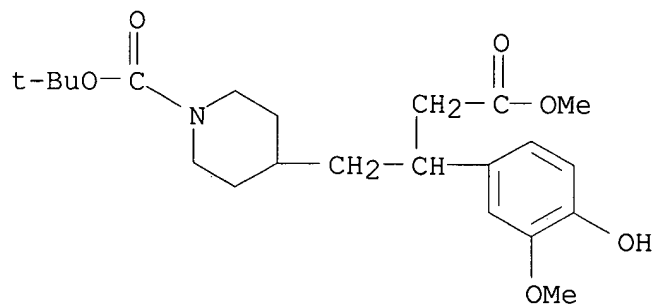
CN 3-Quinolinepropanoic acid, β -[[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny]methyl]-1,2,3,4-tetrahydro-1-methyl-, methyl ester (9CI)
(CA INDEX NAME)



RN 669076-34-0 CAPLUS

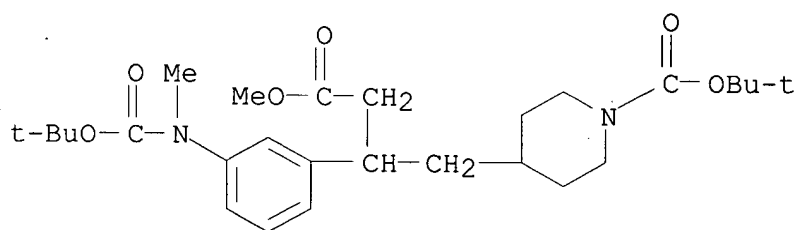
CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(4-hydroxy-3-methoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



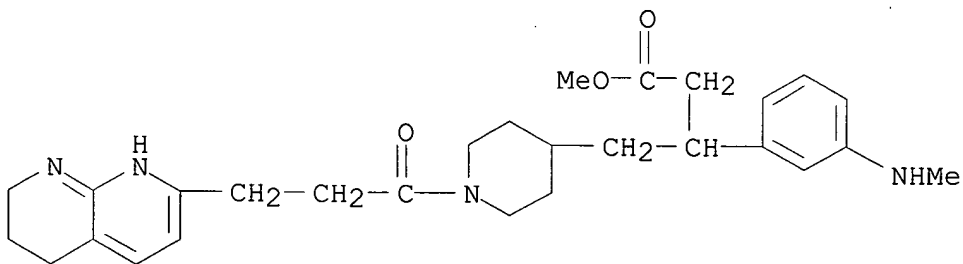
RN 669076-41-9 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-[3-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 669076-44-2 CAPLUS

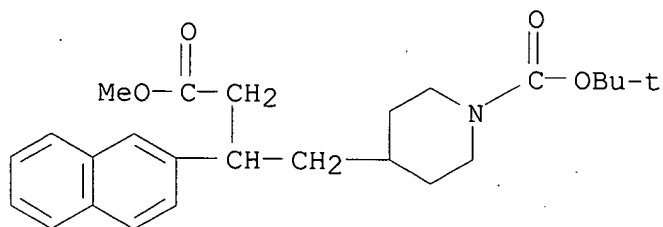
CN 4-Piperidinebutanoic acid, β-[3-(methylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 669076-49-7 CAPLUS

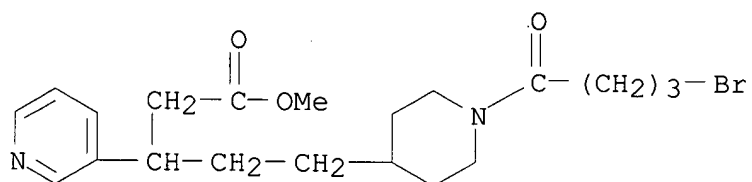
CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-2-naphthalenyl-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



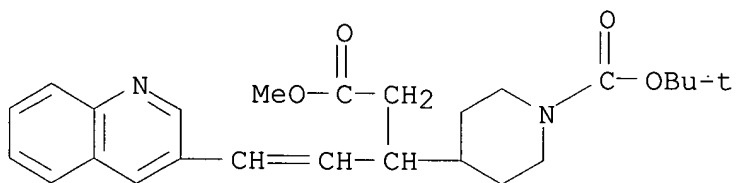
RN 791820-73-0 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-(4-bromo-1-oxobutyl)-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



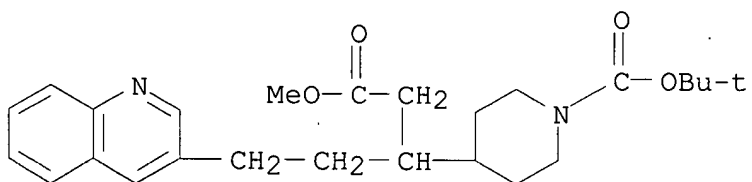
RN 791820-76-3 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -[2-(3-quinolinyl)ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 791820-77-4 CAPLUS

CN 3-Quinolinepentanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

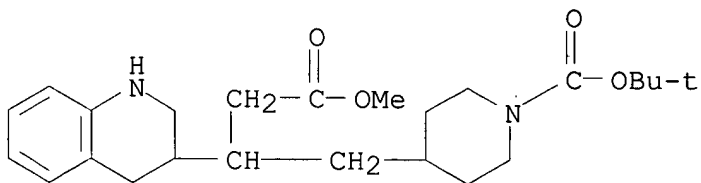


RN 791820-85-4 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-

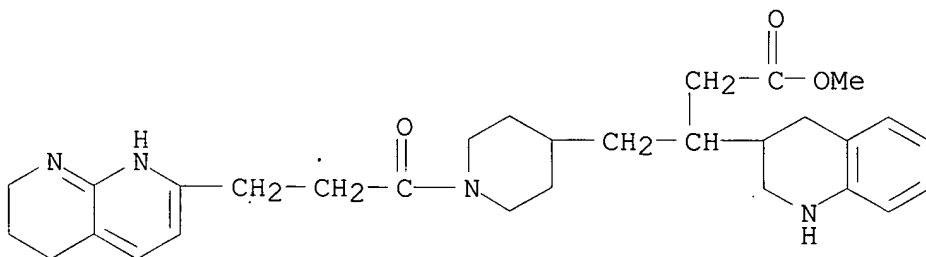
10/782,060

piperidiny]methyl]-1,2,3,4-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)



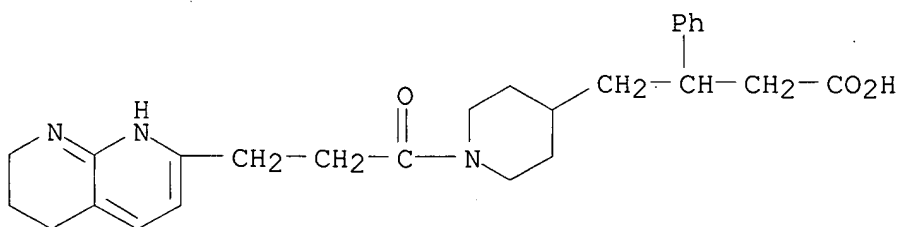
RN 791820-91-2 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 791820-92-3 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -phenyl-, monosodium salt (9CI) (CA INDEX NAME)

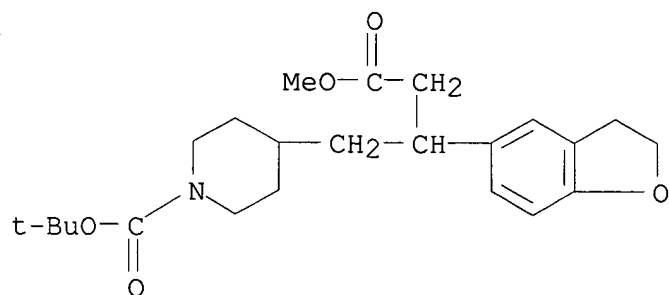


● Na

RN 791820-99-0 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

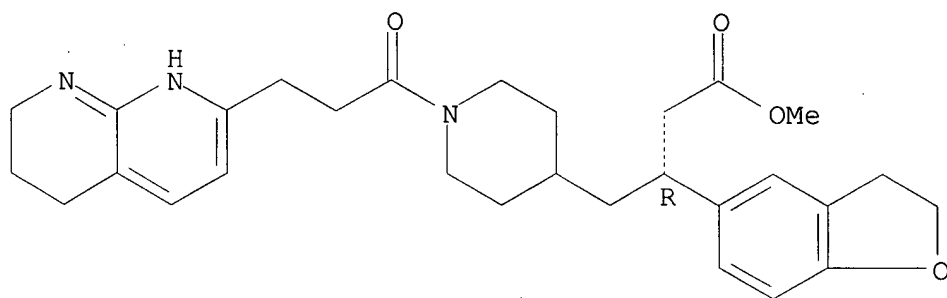
10/782,060



RN 791821-06-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (BR)- (9CI) (CA INDEX NAME)

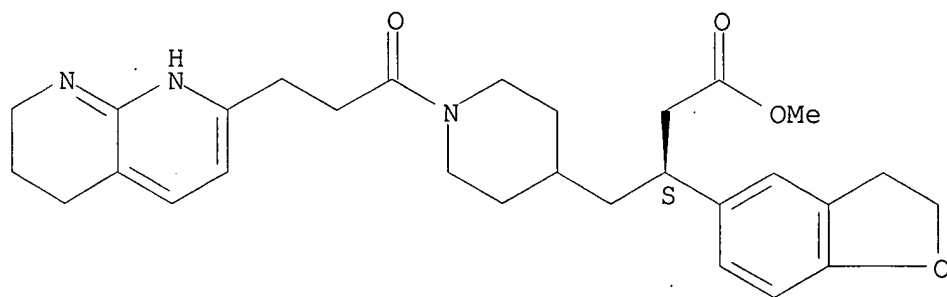
Absolute stereochemistry.



RN 791821-07-3 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (BS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

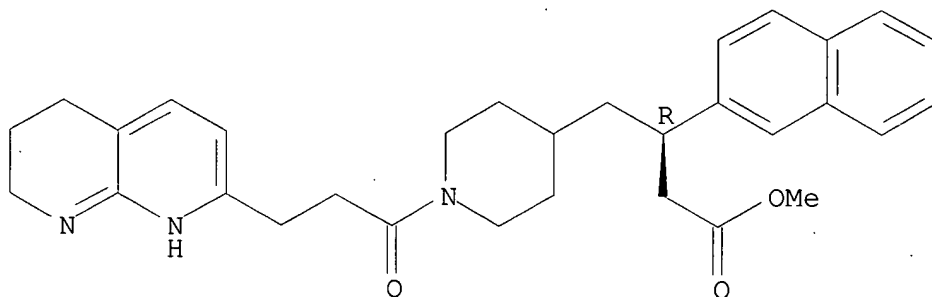


RN 791821-19-7 CAPLUS

10/782,060

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (β R)- (9CI)
(CA INDEX NAME)

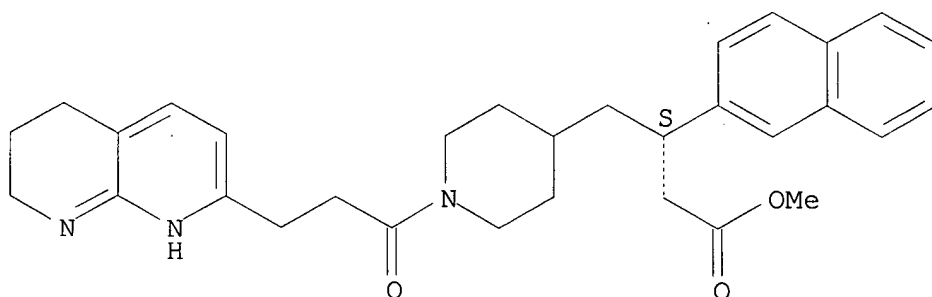
Absolute stereochemistry.



RN 791821-20-0 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (β S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

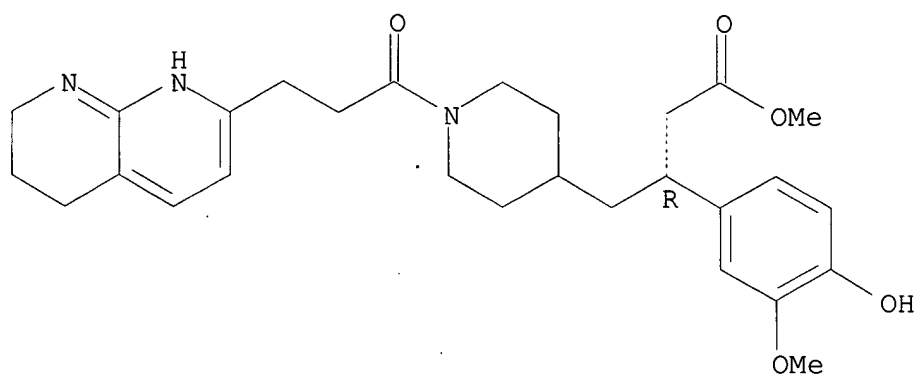


RN 791821-32-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

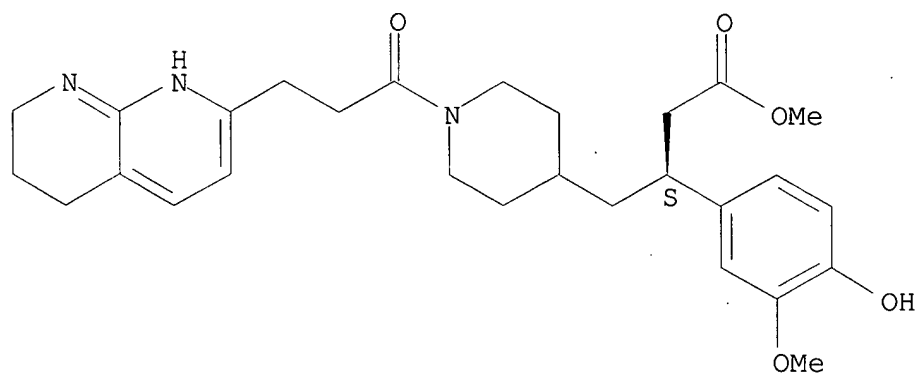
10/782,060



RN 791821-33-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester, (R)- (9CI) (CA INDEX NAME)

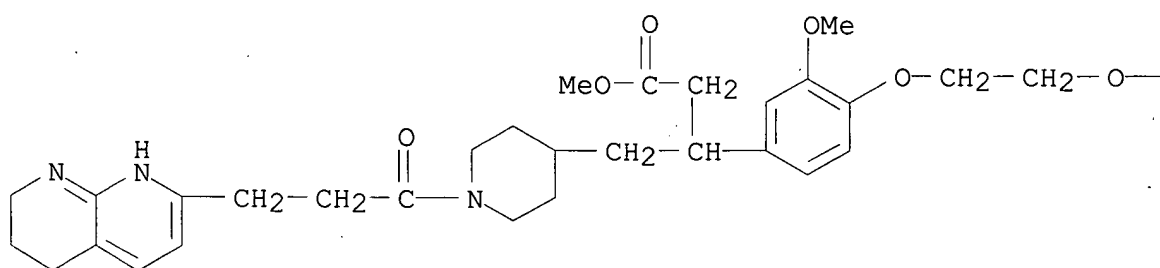
Absolute stereochemistry.



RN 791821-36-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -[4-[2-(2-bromoethoxy)ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



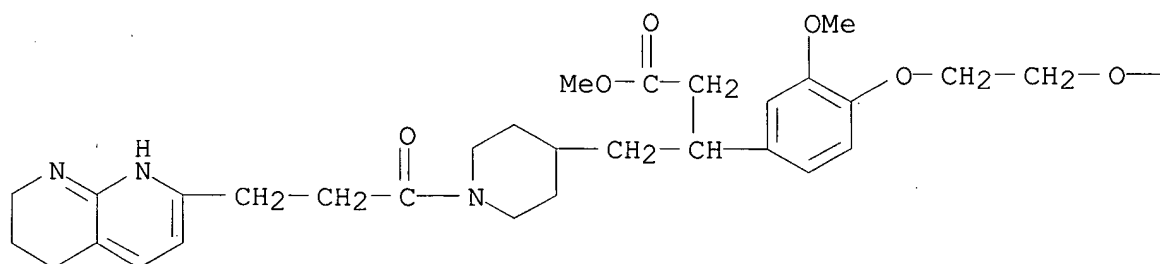
PAGE 1-B

—CH₂—CH₂Br

RN 791821-37-9 CAPLUS

CN 4-Piperidinebutanoic acid, β-[4-[2-[2-(acetylthio)ethoxy]ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

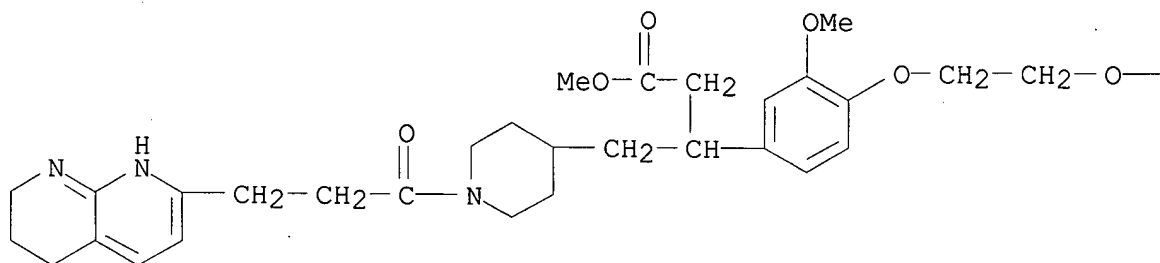
—CH₂—CH₂—SAC

RN 791821-39-1 CAPLUS

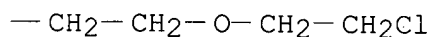
CN 4-Piperidinebutanoic acid, β-[4-[2-[2-(2-chloroethoxy)ethoxy]ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA INDEX NAME)

10/782,060

PAGE 1-A



PAGE 1-B

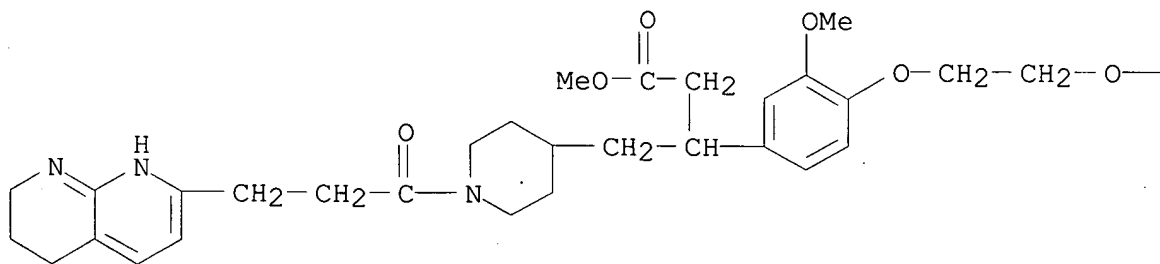


RN 791821-40-4 CAPLUS

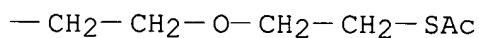
CN 4-Piperidinebutanoic acid, β-[4-[2-[2-[2-(acetylthio)ethoxy]ethoxy]ethoxy]-3-methoxyphenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA

INDEX
NAME)

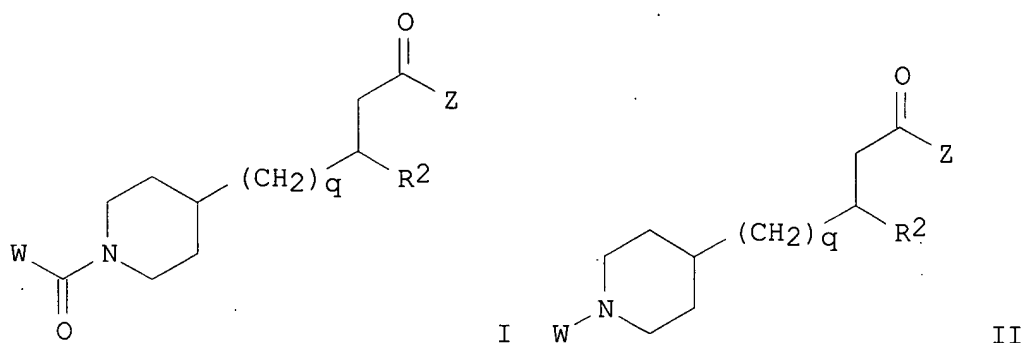
PAGE 1-A



PAGE 1-B



GI

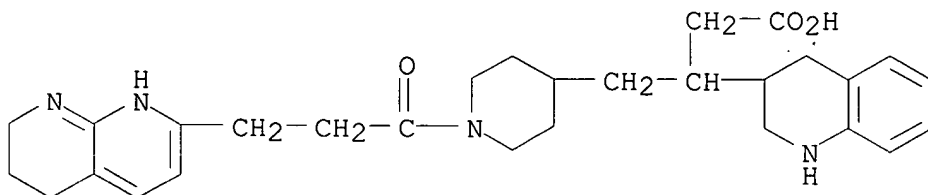


AB The present invention relates to the synthesis and biol. application of piperidinoyl carboxylic acid integrin antagonists affinity moiety of formula (I) and formula (II) [W = -CO-6alkyl(R1), -C1-6 alkyl(R1a), -CO-6alkylaryl(R1,R8), -CO-6 alkylheterocyclyl(R1,R8), etc.; R1 = H, (un)substituted NH2, -heterocyclyl-(R8), -heteroaryl-(R8); R1a = -C(R4)(:NR4), -C(:NR4)-N(R4)2, -C(:NR4)-N(R4)(R6), -C(:N-R4)-N(R4)-C(O)-R4, etc.; R4 = H, C1-8 alkyl; R8 = H, -C1-8 alkyl(R9), -CHO, -CO-C1-8 alkyl(R9), -CONH2, etc.; R9 = H, C1-8 alkoxy, each (un)substituted NH2, CONH2, or SO2NH2, CHO, etc.; q = 0-3; R2 = -C1-8 alkyl(R7)(R11), -C2-8 alkenyl(R7)(R11), -C2-8 alkynyl(R7)(R11), -cycloalkyl-(R7)(R11), -heterocyclyl-(R8)(R12), etc.; R7 = H, -C1-8 alkoxy(R9), each (un)substituted NH2 or CONH2, CHO, -CO-C1-8 alkyl(R9), etc.; R11 = -C1-8 alkyl(R14), -O-C1-8 alkyl(R14), -NH-C1-8 alkyl(R14), -S-C1-8 alkyl(R14), etc.; R12 = -C1-8 alkyl(R14), -O-C1-8 alkyl(R14), -NH-C1-8 alkyl(R14), etc.; R14 when R11 and R12 terminates with a C(:O) is selected from the group consisting of H, OH, -OC1-4 alkyl, and NH2; otherwise R14 = OH, SH, CO2H, CO2-1-4 alkyl; Z = OH, (un)substituted NH2, -O-C1-8 alkyl, -C1-8 alkyl-OH, -O-C1-8 alkyl-C1-8 alkoxy, etc.] and pharmaceutically acceptable salts, racemic mixts., and enantiomers thereof. These affinity moieties maybe used with imaging agents or liposomes to target cells that express the $\alpha\text{v}\beta 3$, $\alpha\text{v}\beta 5$, or $\alpha\text{v}\beta 6$ integrin receptors. For example, an enantiomer of 6-methoxy- β -[[1-[1-oxo-3-(5,6,7,8-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-3-pyridinepropanoic acid inhibited the binding of vitronectin to $\alpha\text{v}\beta 3$, $\alpha\text{v}\beta 5$, and $\alpha\text{IIb}\beta 3$ receptors with IC50 of 0.0003 ± 0.00002 , 0.0042 ± 0.0018 , and $1.83 \pm 0.57 \mu\text{M}$, resp.

L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

10/782,060

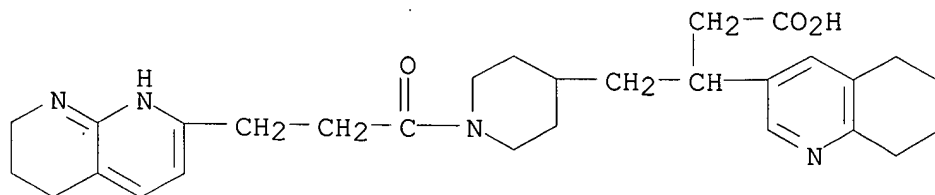
ACCESSION NUMBER: 2004:880527 CAPLUS
DOCUMENT NUMBER: 142:74427
TITLE: 1,2,3,4-Tetrahydroquinoline-containing $\alpha\beta 3$
integrin antagonists with enhanced oral
bioavailability
AUTHOR(S): Ghosh, Shyamali; Santulli, Rosemary J.; Kinney,
William A.; DeCorte, Bart L.; Liu, Li; Lewis, Joan
M.;
Proost, Jef C.; Leo, Gregory C.; Masucci, John;
Hageman, William E.; Thompson, Andrew S.; Chen,
Ian;
A.;
Kawahama, Reiko; Tuman, Robert W.; Galemme, Robert
Bruce
Johnson, Dana L.; Damiano, Bruce P.; Maryanoff,
E.
CORPORATE SOURCE: Drug Discovery, Johnson & Johnson Pharmaceutical
Research & Development, Spring House, PA,
19477-0776,
USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),
14(23), 5937-5941
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:74427
IT 669075-10-9P 669075-11-0P 669075-38-1P
669075-39-2P 669075-53-0P 669076-08-8P
669076-79-3P 669076-80-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(preparation of 1,2,3,4-tetrahydroquinoline-containing $\alpha\beta 3$
integrin
antagonists with enhanced oral bioavailability)
RN 669075-10-9 CAPLUS
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-
tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]- (9CI)
(CA
INDEX NAME)



RN 669075-11-0 CAPLUS
CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-

10/782,060

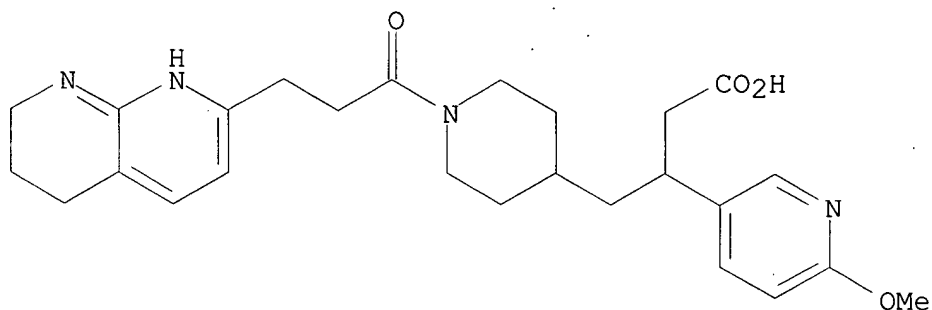
(CA tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]- (9CI)
INDEX NAME)



RN 669075-38-1 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, (+)-(9CI) (CA INDEX NAME)

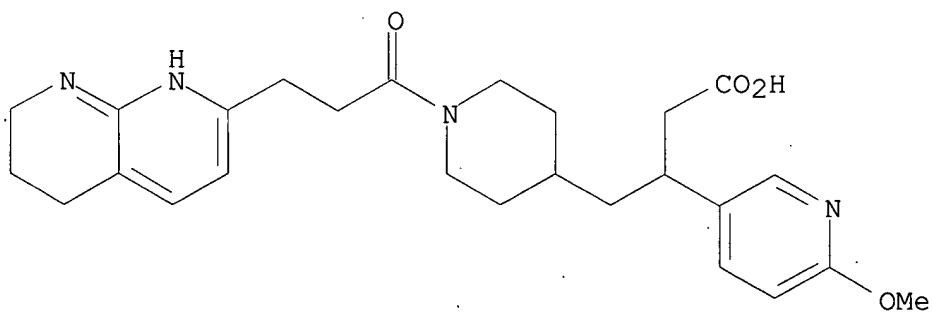
Rotation (+).



RN 669075-39-2 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, (-)-(9CI) (CA INDEX NAME)

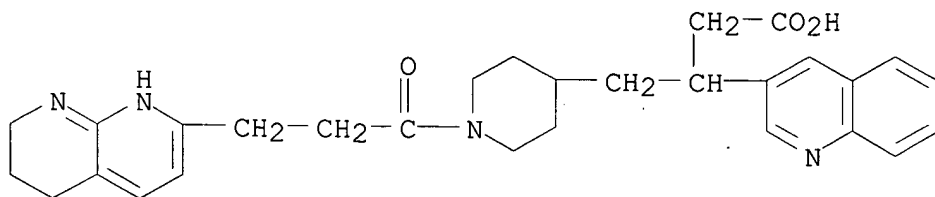
Rotation (-).



RN 669075-53-0 CAPLUS

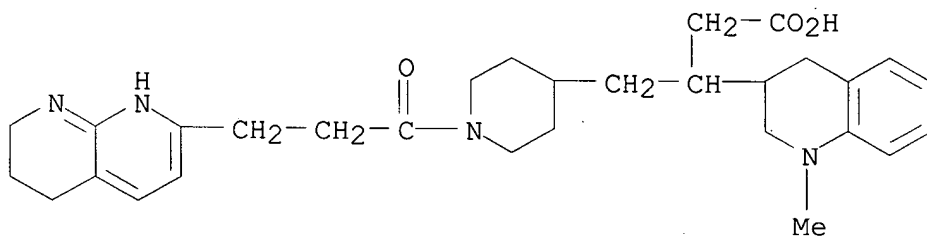
10/782,060

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]- (9CI) (CA INDEX NAME)



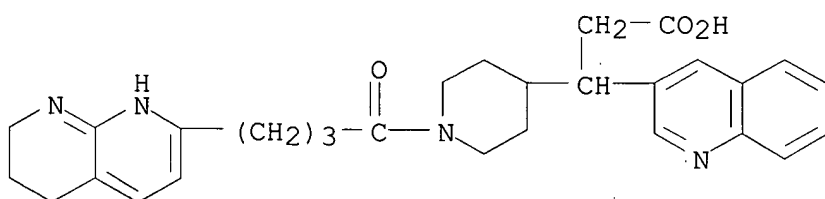
RN 669076-08-8 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-1-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]- (9CI) (CA INDEX NAME)



RN 669076-79-3 CAPLUS

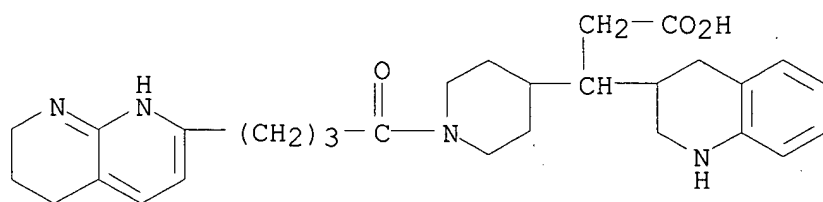
CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 669076-80-6 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

10/782,060



IT 669074-91-3P 669074-99-1P 669075-05-2P
669075-06-3P 669075-08-5P 669075-96-1P
791820-86-5P 791820-87-6P 791820-88-7P
791820-89-8P 791820-91-2P 811842-91-8P
852286-61-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

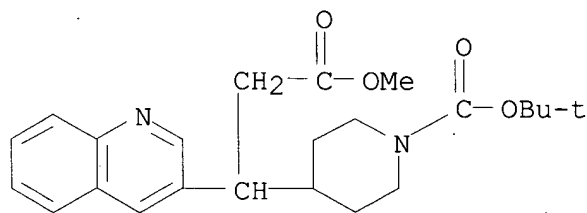
(preparation of 1,2,3,4-tetrahydroquinoline-containing $\alpha\beta 3$

integrin

antagonists with enhanced oral bioavailability)

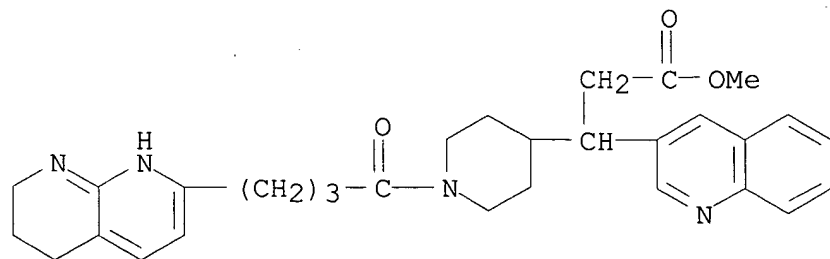
RN 669074-91-3 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669074-99-1 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

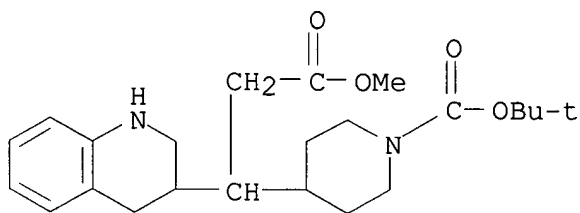


RN 669075-05-2 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-

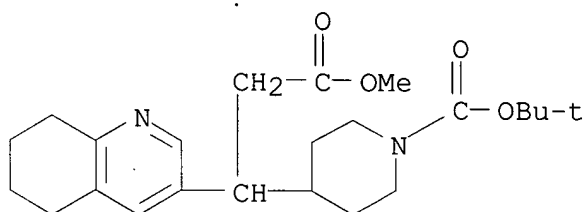
10/782,060

piperidinyl]-1,2,3,4-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)



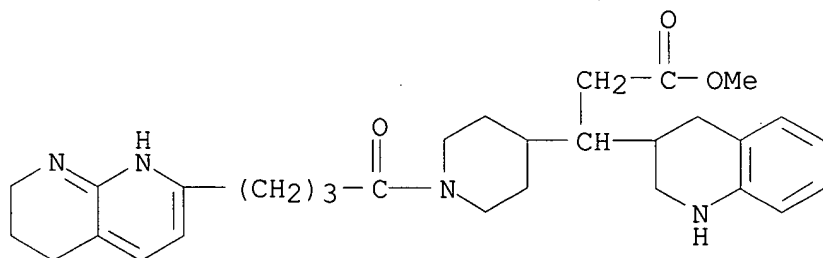
RN 669075-06-3 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-08-5 CAPLUS

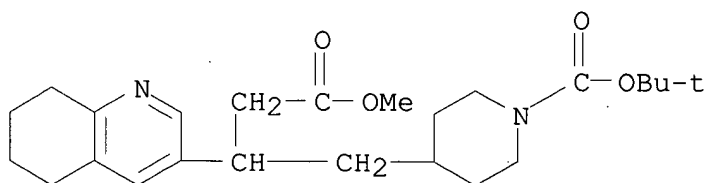
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-96-1 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)

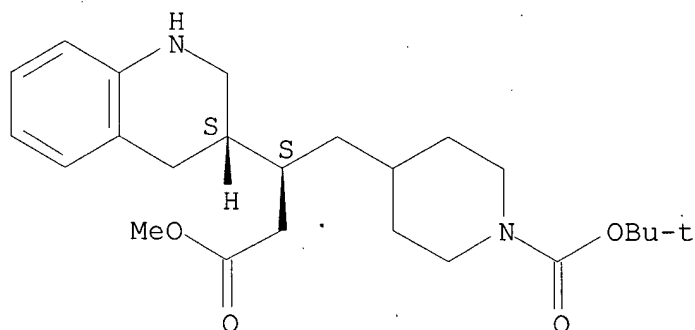
10/782,060



RN 791820-86-5 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, methyl ester, (β S,3S)- (9CI)
(CA INDEX NAME)

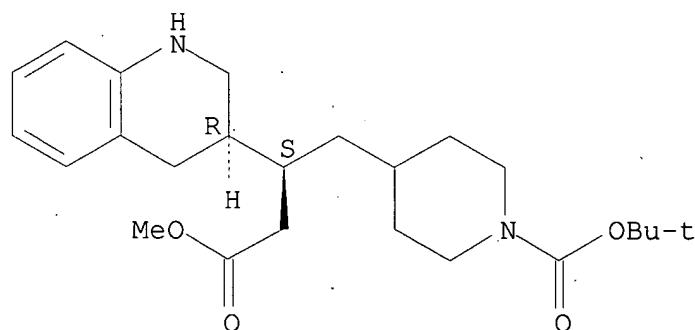
Absolute stereochemistry.



RN 791820-87-6 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, methyl ester, (β S,3R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



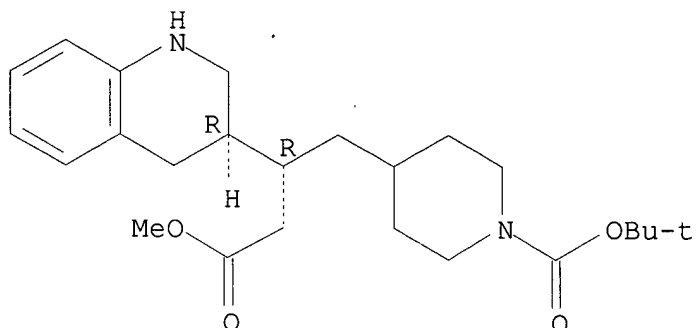
RN 791820-88-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, methyl ester, (β R,3R)- (9CI)

10/782,060

(CA INDEX NAME)

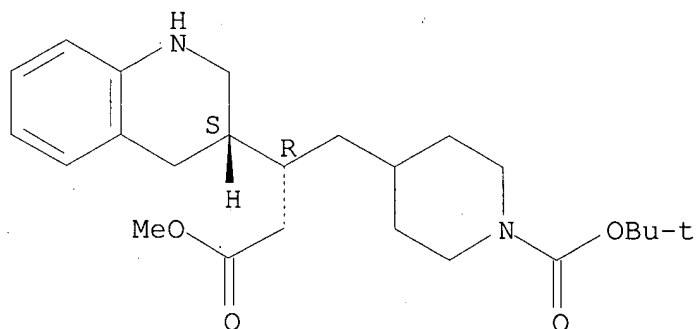
Absolute stereochemistry.



RN 791820-89-8 CAPLUS

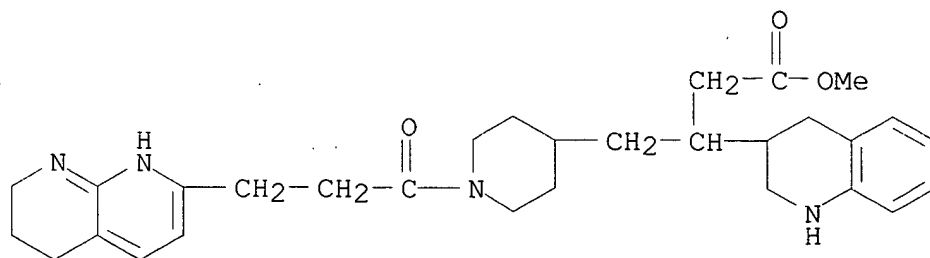
CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, methyl ester, (β R,3S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



RN 791820-91-2 CAPLUS

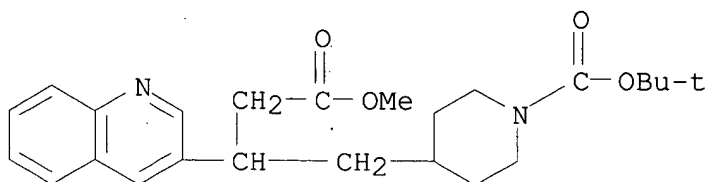
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



10/782,060

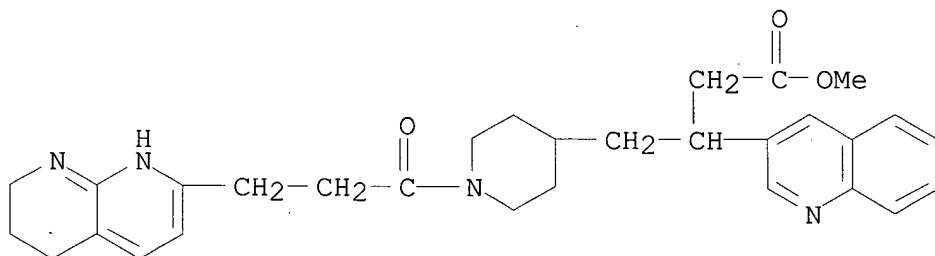
RN 811842-91-8 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 852286-61-4 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]-, methyl ester (9CI)
(CA INDEX NAME)



IT 852201-06-0P 852201-07-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

(preparation of 1,2,3,4-tetrahydroquinolines as antagonists of vitronectin

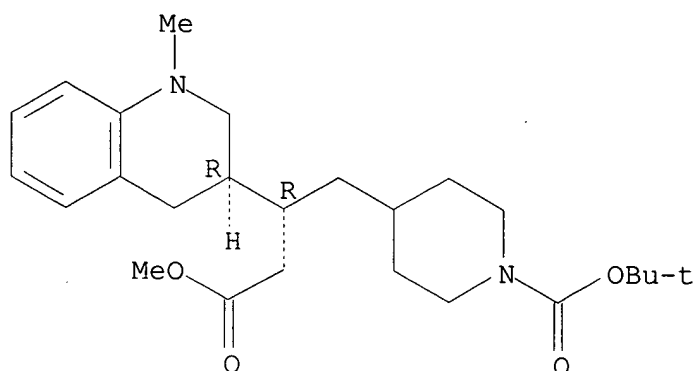
binding to $\alpha v\beta 3$ and $\alpha v\beta 5$ and fibrinogen binding to $\alpha I I b\beta 3$)

RN 852201-06-0 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl)methyl]-1,2,3,4-tetrahydro-1-methyl-, methyl ester, (BR, 3R)- (9CI) (CA INDEX NAME)

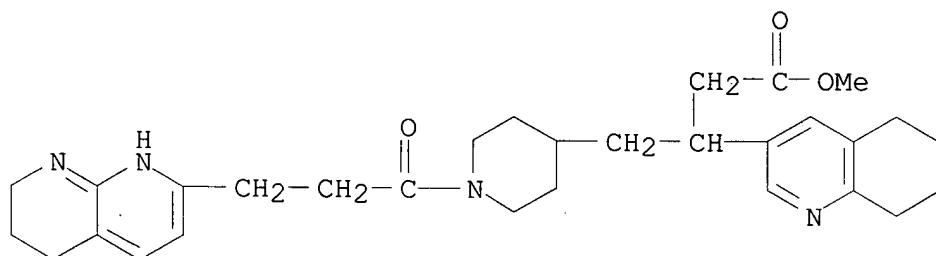
Absolute stereochemistry.

10/782,060



RN 852201-07-1 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



AB Reduction of the quinoline ring in an $\alpha\beta 3$ antagonist yielded a 1,2,3,4-tetrahydro derivative as two diastereomers, the four isomers of which were separated by sequential chiral HPLC. Two isomers had significant $\alpha\beta 3$ antagonist activity with improved oral bioavailability, relative to the corresponding quinoline derivative

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:767310 CAPLUS

DOCUMENT NUMBER: 141:410773

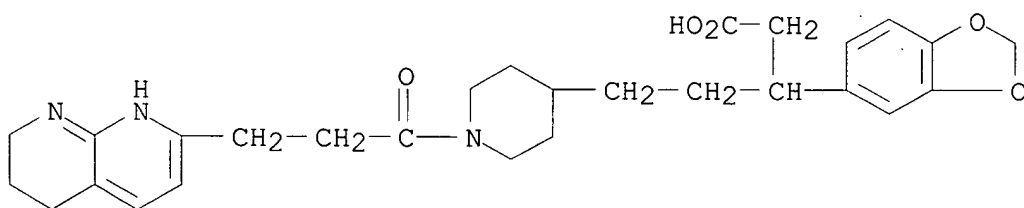
TITLE: Piperidine-containing β -arylpropionic acids as potent antagonists of $\alpha\beta 3/\alpha\beta 5$ integrins

AUTHOR(S): De Corte, Bart L.; Kinney, William A.; Liu, Li; Ghosh,

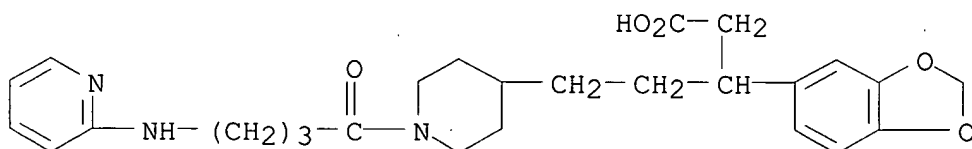
Shyamali; Brunner, Livia; Hoekstra, William J.; Santulli, Rosemary J.; Tuman, Robert W.; Baker,

10/782,060

Judith; Burns, Candace; Proost, Jef C.; Tounge, Brett
Johnson, A.; Damiano, Bruce P.; Maryanoff, Bruce E.;
Dana L.; Galemme, Robert A.
CORPORATE SOURCE: Drug Discovery, Johnson & Johnson Pharmaceutical
Research and Development, Spring House, PA,
19477-0776, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),
14(20), 5227-5232
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:410773
IT 669075-21-2P 669075-28-9P 669075-83-6P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation)
(preparation $\alpha\text{v}\beta 3/\alpha\text{IIb}\beta 3$ integrin binding affinity,
pharmacokinetics, and structure-activity relationship of
 β -aryl(piperidinyl)pentanoic acids starting from
piperidinecarboxylic acid)
RN 669075-21-2 CAPLUS
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-
(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX
NAME)

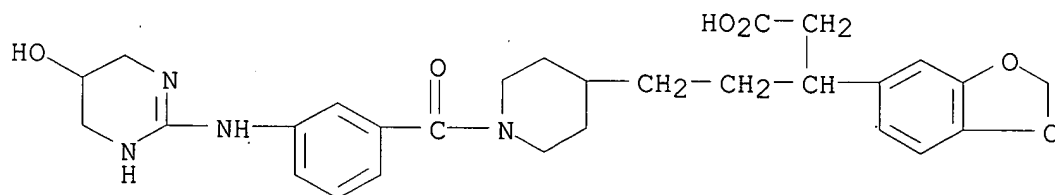


RN 669075-28-9 CAPLUS
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(2-
pyridinylamino)butyl]- (9CI) (CA INDEX NAME)



RN 669075-83-6 CAPLUS
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-
tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX
NAME)

10/782,060.



IT 791064-60-3P 791064-77-2P 791064-78-3P

791064-79-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

TRACT

(Reactant or reagent)

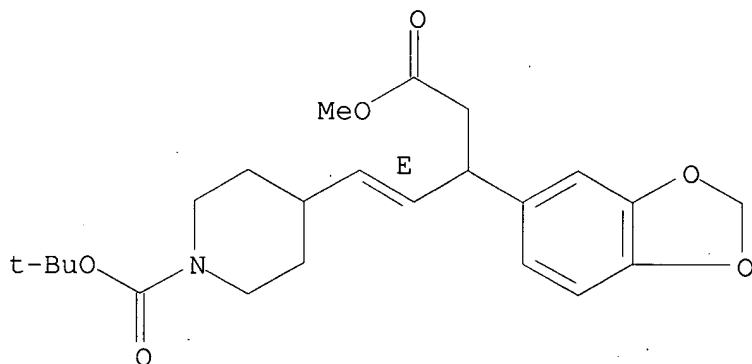
(preparation $\alpha v\beta 3/\alpha IIb\beta 3$ integrin binding affinity, pharmacokinetics, and structure-activity relationship of β -aryl(piperidinyl)pentanoic acids starting from piperidinecarboxylic acid)

RN 791064-60-3 CAPLUS

CN 1-Piperidinecarboxylic acid,

4-[(1E)-3-(1,3-benzodioxol-5-yl)-5-methoxy-5-oxo-1-pentenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



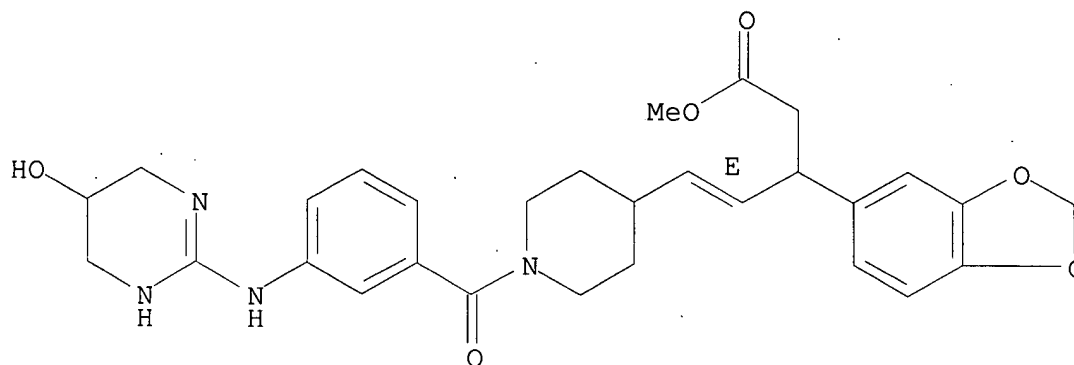
RN 791064-77-2 CAPLUS

CN 1,3-Benzodioxole-5-propanoic acid, β -[(1E)-2-[1-[3-[(1,4,5,6-

tetrahydro-5-hydroxy-2-pyrimidinyl) amino]benzoyl]-4-piperidinyl]ethenyl]-,
methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

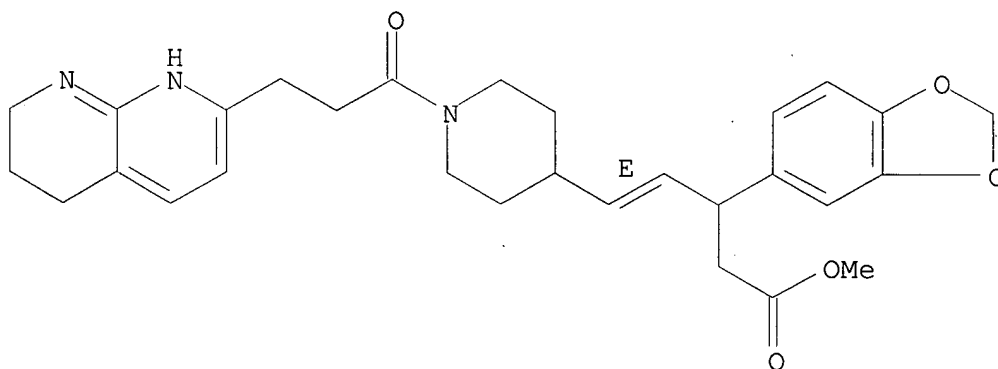
10/782,060



RN 791064-78-3 CAPLUS

CN 1,3-Benzodioxole-5-propanoic acid, β -[(1E)-2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethenyl]-, methyl ester (9CI) (CA INDEX NAME)

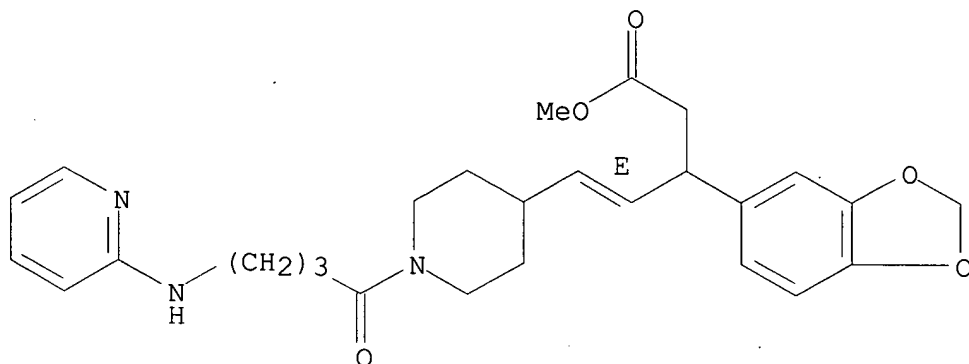
Double bond geometry as shown.



RN 791064-79-4 CAPLUS

CN 1,3-Benzodioxole-5-propanoic acid, β -[(1E)-2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethenyl]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

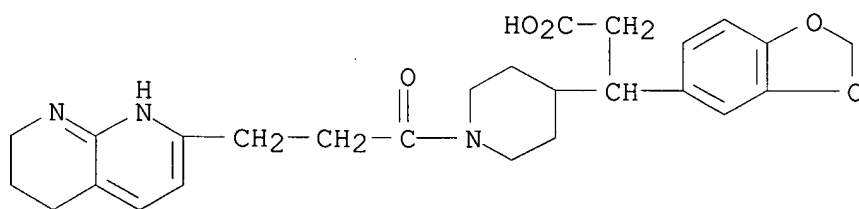


IT 669075-00-7P 669075-01-8P 669075-02-9P
 669075-40-5P 669075-48-3P 669075-51-8P
 669075-56-3P 669075-66-5P 669075-68-7P
 669075-84-7P 669075-93-8P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation $\alpha\beta 3/\alpha II\beta 3/\alpha\beta 5$ integrin binding affinity, and structure-activity relationship of β -aryl(pyridinyl)alkanoic acids starting from piperidinylalkanoic acids)

RN 669075-00-7 CAPLUS

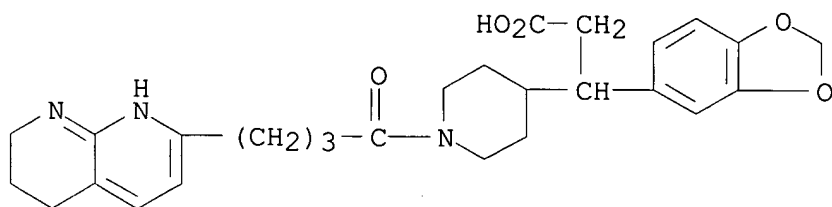
CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-01-8 CAPLUS

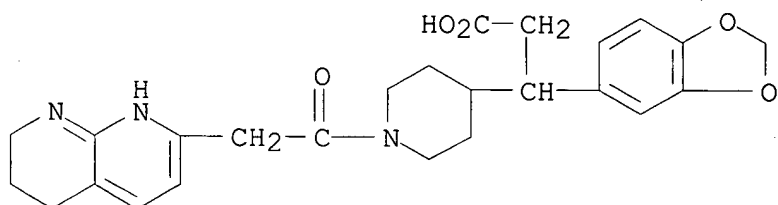
CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)

10/782,060



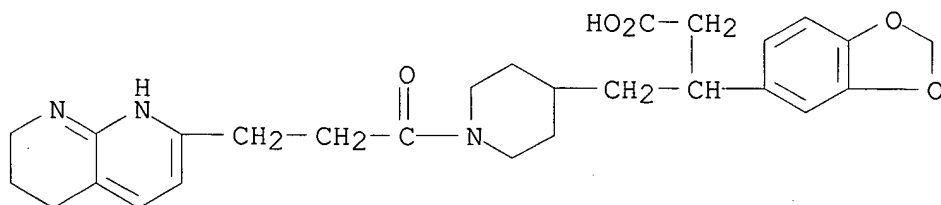
RN 669075-02-9 CAPLUS

CN 4-Piperidinepropanoic acid, β-1,3-benzodioxol-5-yl-1-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)



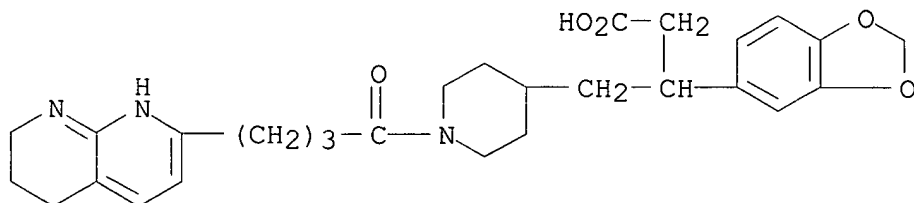
RN 669075-40-5 CAPLUS

CN 4-Piperidinebutanoic acid, β-1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-48-3 CAPLUS

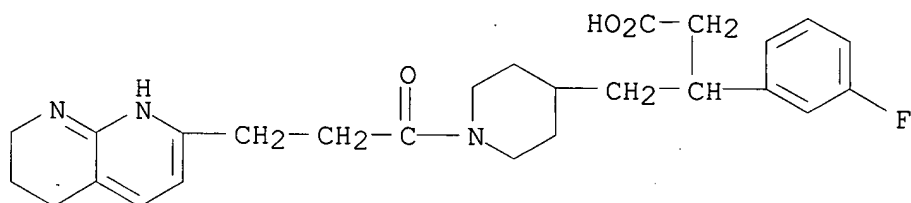
CN 4-Piperidinebutanoic acid, β-1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



10/782,060

RN 669075-51-8 CAPLUS

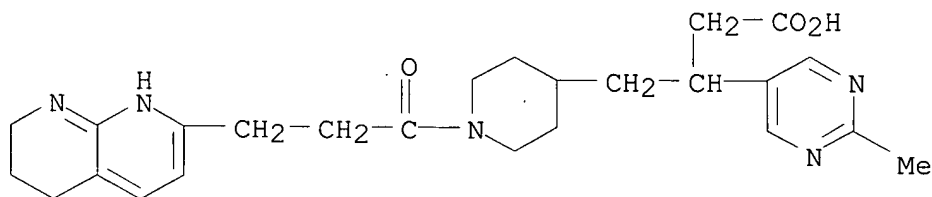
CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-56-3 CAPLUS

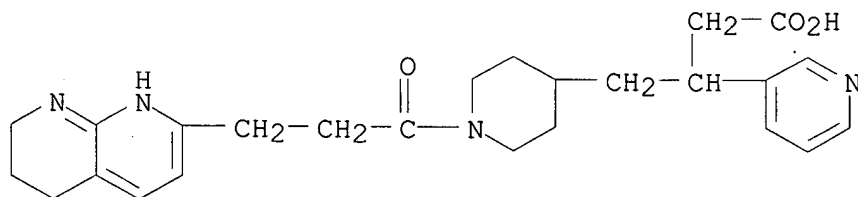
CN 5-Pyrimidinepropanoic acid, 2-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA INDEX NAME)



RN 669075-66-5 CAPLUS

CN 3-Pyridinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

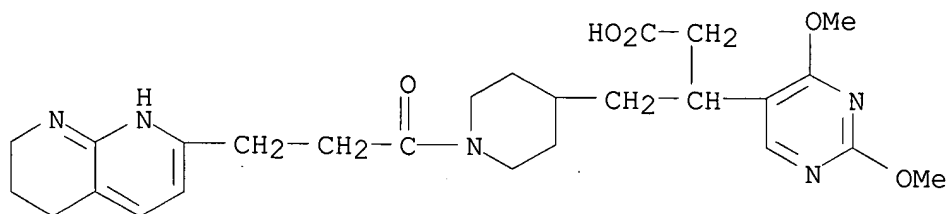


RN 669075-68-7 CAPLUS

CN 5-Pyrimidinepropanoic acid, 2,4-dimethoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

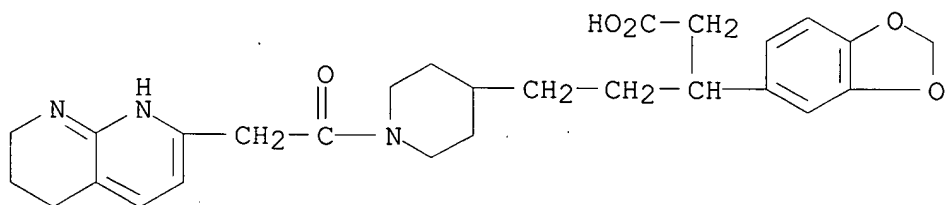
(CA INDEX NAME)

10/782,060



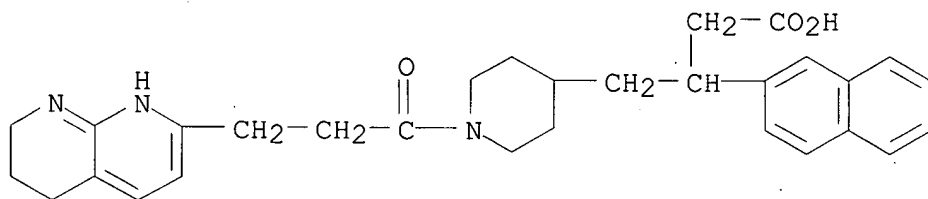
RN 669075-84-7 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

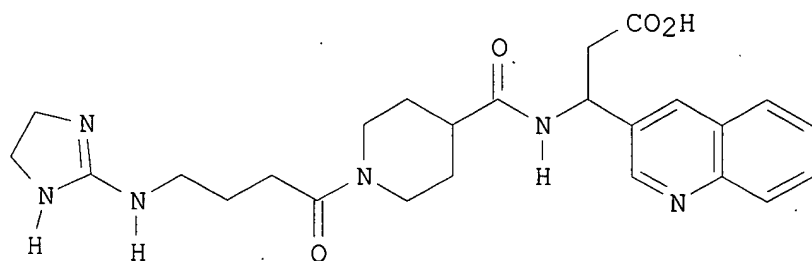


RN 669075-93-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



GI



I

AB The synthesis and SAR of a class of piperidine-based

10/782,060

$\alpha\text{v}\beta 3/\alpha\text{v}\beta 5$ integrin antagonists, e.g., I, is described. Replacement of an amide bond in a prototype isonipecotamide by a C-C isostere, and adjustment of the spacer length between the carboxylic acid and basic moieties, led to low nanomolar antagonists of $\alpha\text{v}\beta 3$ and/or $\alpha\text{v}\beta 5$ integrins with excellent selectivity vs. $\alpha\text{IIb}\beta 3$.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:546479 CAPLUS

DOCUMENT NUMBER: 141:106374

TITLE: A preparation of novel piperidine derivatives as modulators of chemokine receptor CCR5

INVENTOR(S): Cumming, John; Faull, Alan; Fielding, Colin; Oldfield,

John; Tucker, Howard

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2004056773	A1	20040708	WO 2003-SE2008	20031218
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,				
TD, TG				
CA 2508624	A1	20040708	CA 2003-2508624	20031218
AU 2003288856	A1	20040714	AU 2003-288856	20031218
EP 1572650	A1	20050914	EP 2003-781235	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017459	A	20051116	BR 2003-17459	20031218
CN 1732153	A	20060208	CN 2003-80107833	20031218
JP 2006514107	T	20060427	JP 2005-502630	20031218
US 2006189650	A1	20060824	US 2005-539859	20050617

10/782,060

NO 2005003539	A	20050920	NO 2005-3539	20050719
PRIORITY APPLN. INFO.:			SE 2002-3821	A 20021220
			SE 2003-499	A 20030224
			SE 2003-1425	A 20030515
			WO 2003-SE2008	W 20031218

OTHER SOURCE(S): MARPAT 141:106374

IT 718610-71-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

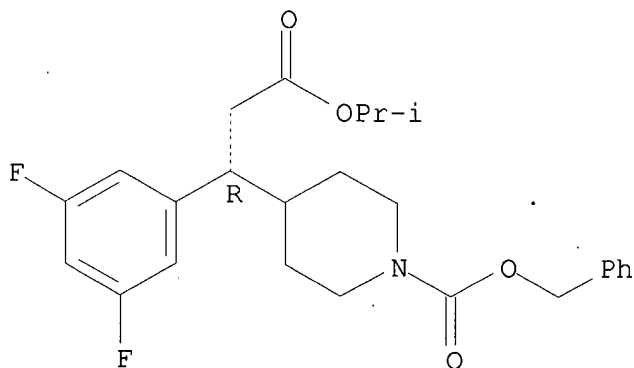
(preparation of novel piperidine derivs. as modulators of chemokine receptor

ccr5)

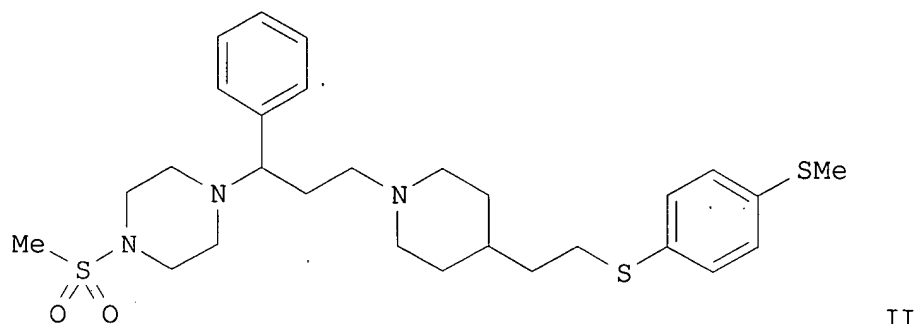
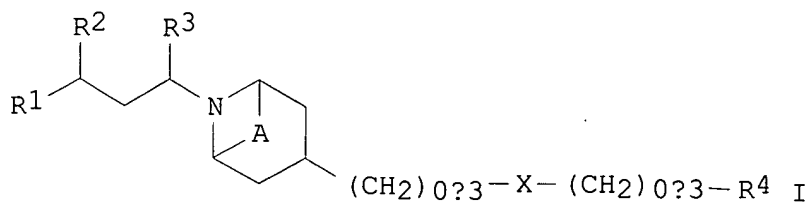
RN 718610-71-0 CAPLUS

CN 4-Piperidinepropanoic acid, β -(3,5-difluorophenyl)-1-
[(phenylmethoxy)carbonyl]-, 1-methylethyl ester, (β R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



GI



AB The invention relates to a preparation of novel piperidine derivs. of formula I

[wherein: A is absent or (CH₂)₂; R₁ is alkyl, C(O)NH-alkyl, or CO₂-alkyl,

etc.; R₂ is alkyl, Ph, heteroaryl, or cycloalkyl; R₃ is H or alkyl; R₄ is

(hetero)aryl or (cyclo)alkyl; X is O or S(O)₀₋₂], useful as modulators of

chemokine receptor CCR5. The invention compds. are claimed to be useful

for the treatment of CCR5-mediated diseases such as autoimmune, inflammatory, or proliferative diseases. The invented compds. are also of

value in inhibiting the entry of viruses (such as HIV) into target cells

(no biol. data). The ability of the invention compds. to inhibit the binding of RANTES and MIP-1 α was assessed (certain compds. of formula I have IC₅₀ < 50 μ M). For instance, Pic50 (neg. log of the IC₅₀ result) for piperidine derivative II was determined as 6.91 (table XV).

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:203829 CAPLUS

DOCUMENT NUMBER: 140:253451

TITLE: Piperidinyl compounds that selectively bind integrins

10/782,060

INVENTOR(S): De Corte, Bart; Kinney, William A.; Maryanoff, Bruce
PATENT ASSIGNEE(S): E.; Ghosh, Shyamali; Liu, Li
SOURCE: Janssen Pharmaceutica N.V., Belg.
PCT Int. Appl., 184 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004020435	A1	20040311	WO 2003-US25782	20030815
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003259891	A1	20040319	AU 2003-259891	20030815
CA 2496127	A1	20050216	CA 2003-2496127	20030815
EP 1539739	A1	20050615	EP 2003-791686	20030815
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013534	A	20050712	BR 2003-13534	20030815
CN 1688572	A	20051026	CN 2003-824090	20030815
JP 2005539049	T	20051222	JP 2004-532905	20030815
NO 2005001273	A	20050510	NO 2005-1273	20050311
IN 2005KN00434	A	20060303	IN 2005-KN434	20050316
PRIORITY APPLN. INFO.:			US 2002-404239P	P 20020816
			WO 2003-US25782	W 20030815

OTHER SOURCE(S): MARPAT 140:253451
IT 669074-91-3P 669074-96-8P 669074-99-1P
669075-05-2P 669075-08-5P 669075-14-3P
669075-16-5P 669075-18-7P 669075-20-1P
669075-26-7P 669075-33-6P 669075-35-8P
669075-44-9P 669075-47-2P 669075-75-6P
669075-76-7P 669075-79-0P 669075-88-1P
669075-92-7P 669076-23-7P 669076-28-2P
669076-34-0P 669076-37-3P 669076-41-9P
669076-44-2P 669076-49-7P 669076-54-4P
669076-74-8P 669076-76-0P

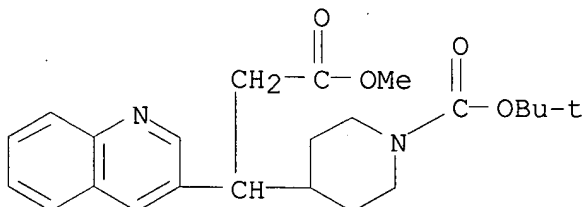
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)

10/782,060

(intermediate; preparation of piperidiny l derivs. useful as $\alpha\text{v}\beta 3$ and $\alpha\text{v}\beta 5$ integrin receptor antagonists)

RN 669074-91-3 CAPLUS

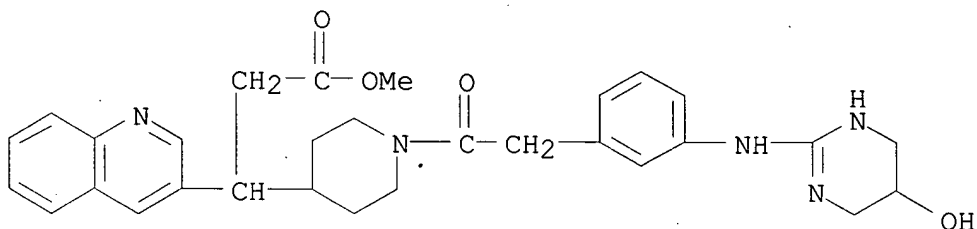
CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny l]-, methyl ester (9CI) (CA INDEX NAME)



RN 669074-96-8 CAPLUS

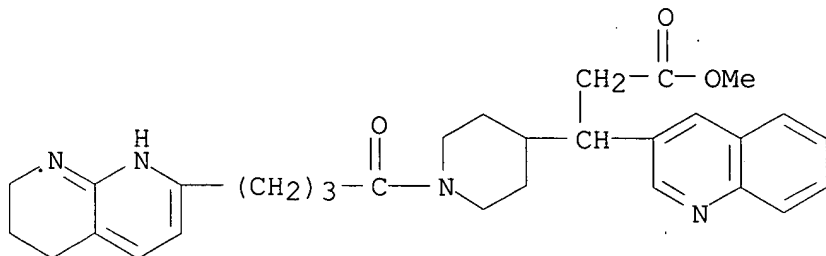
CN 3-Quinolinepropanoic acid, β -[1-[[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]phenyl]acetyl]-4-piperidiny l]-, methyl ester (9CI)

(CA INDEX NAME)



RN 669074-99-1 CAPLUS

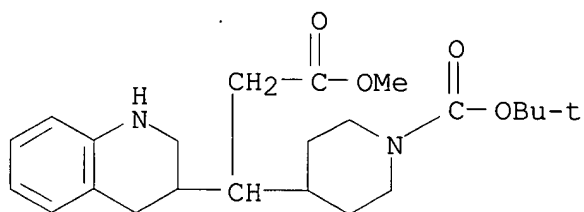
CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidiny l]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-05-2 CAPLUS

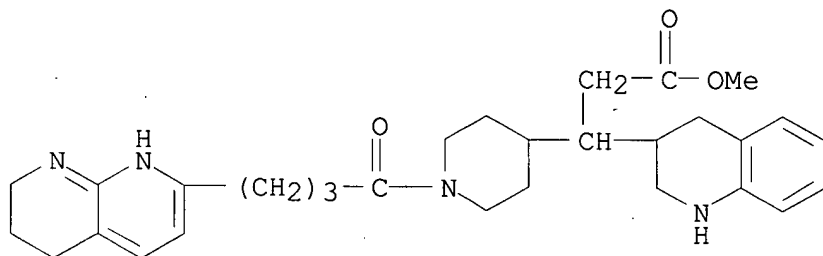
CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny l]-1,2,3,4-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



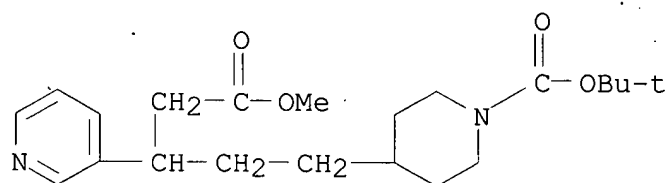
RN 669075-08-5 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-14-3 CAPLUS

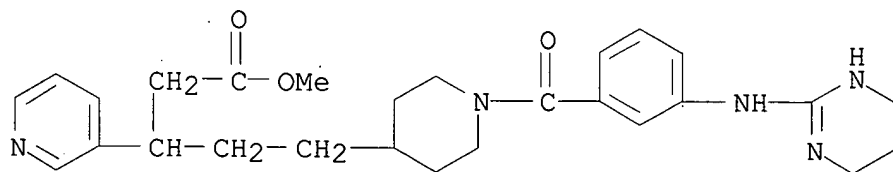
CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-16-5 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)
(CA INDEX NAME)

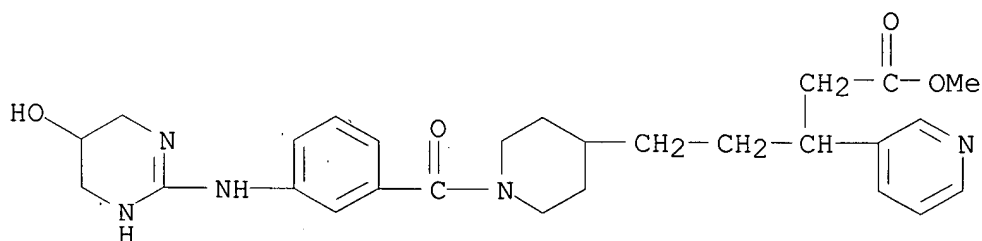
10/782,060



RN 669075-18-7 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)

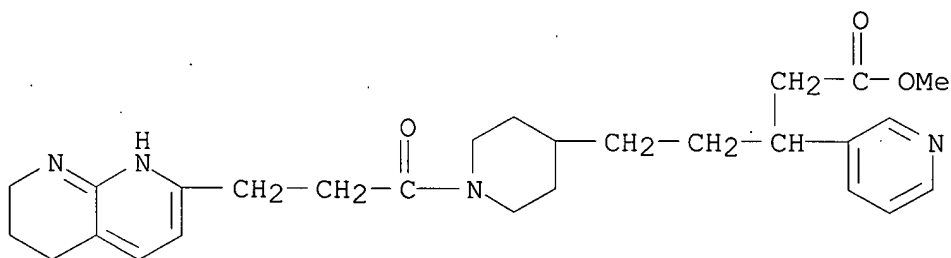
(CA INDEX NAME)



RN 669075-20-1 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)

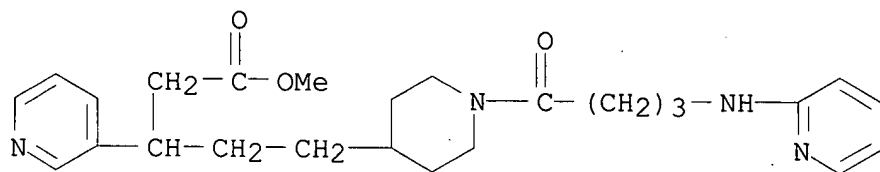
(CA INDEX NAME)



RN 669075-26-7 CAPLUS

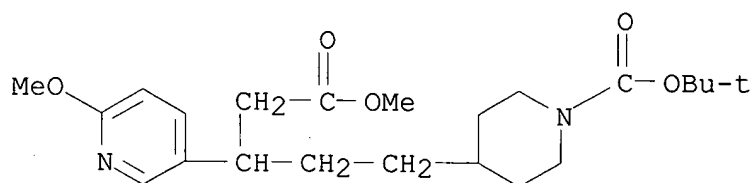
CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



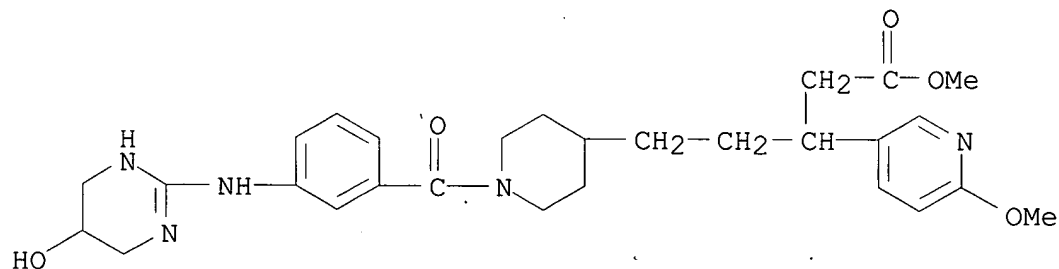
RN 669075-33-6 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-6-methoxy-, methyl ester (9CI) . (CA INDEX NAME)



RN 669075-35-8 CAPLUS

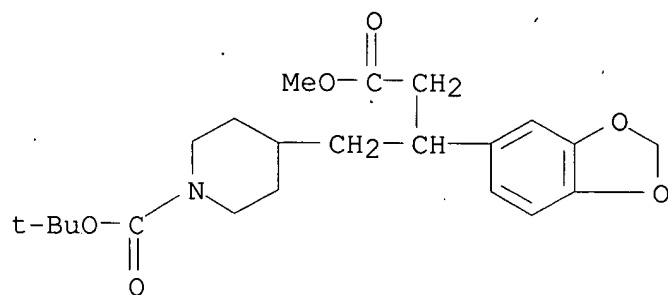
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-44-9 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

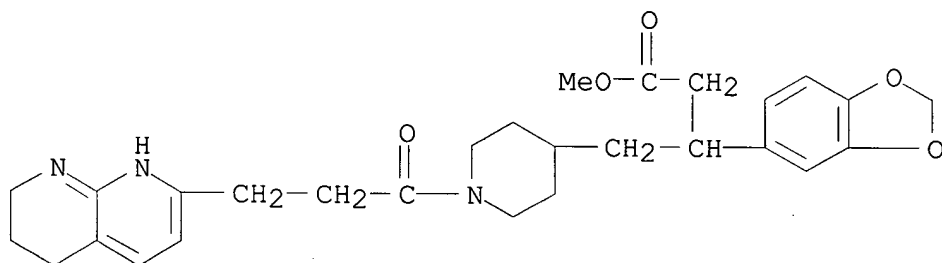
10/782,060



RN 669075-47-2 CAPLUS

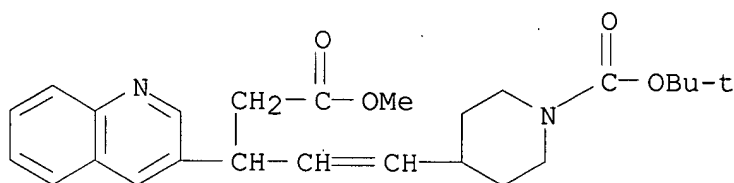
CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA

INDEX
NAME)



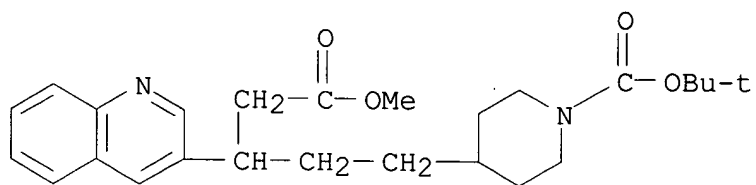
RN 669075-75-6 CAPLUS

CN 3-Quinolinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-76-7 CAPLUS

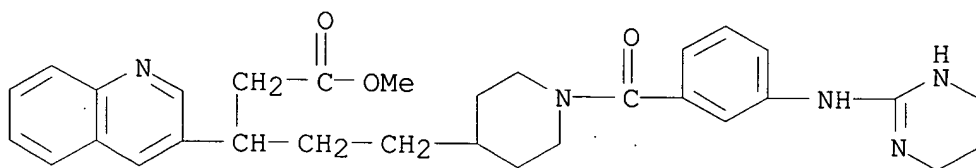
CN 3-Quinolinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-79-0 CAPLUS

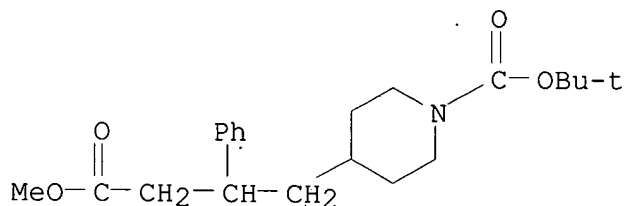
CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, methyl ester (9CI)

(CA INDEX NAME)



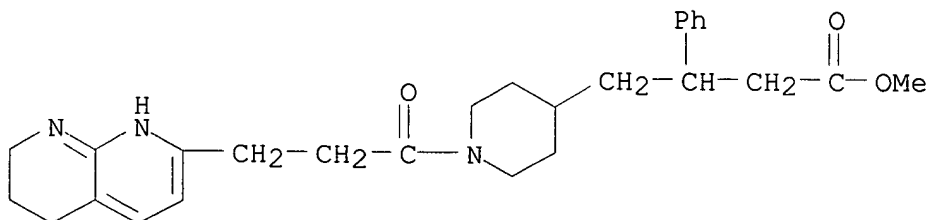
RN 669075-88-1 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -phenyl-, methyl ester (9CI) (CA INDEX NAME)



RN 669075-92-7 CAPLUS

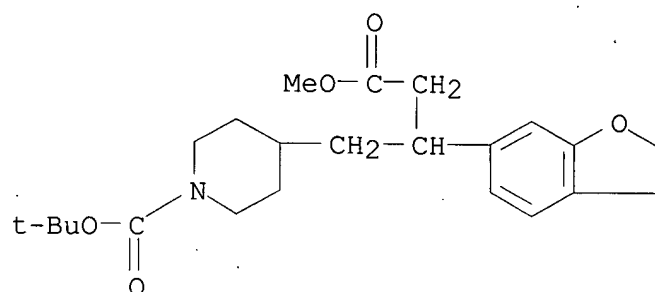
CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -phenyl-, methyl ester (9CI) (CA INDEX NAME)



10/782,060

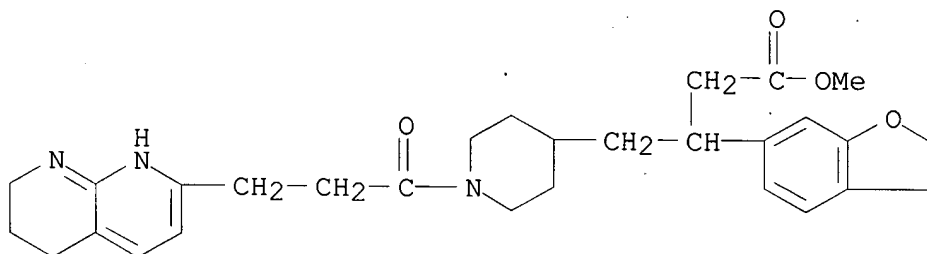
RN 669076-23-7 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



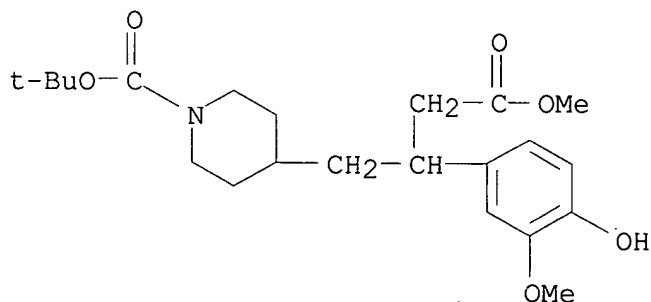
RN 669076-28-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 669076-34-0 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(4-hydroxy-3-methoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)

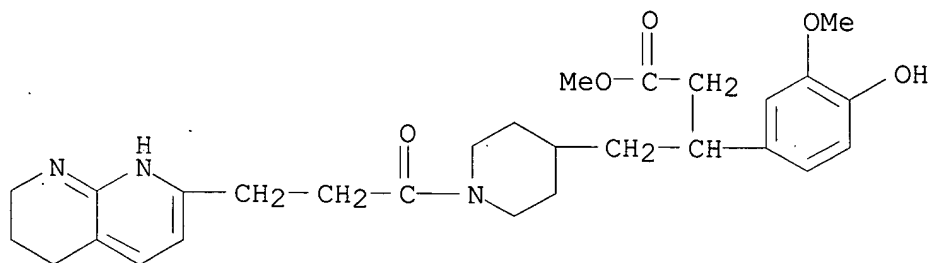


RN 669076-37-3 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-

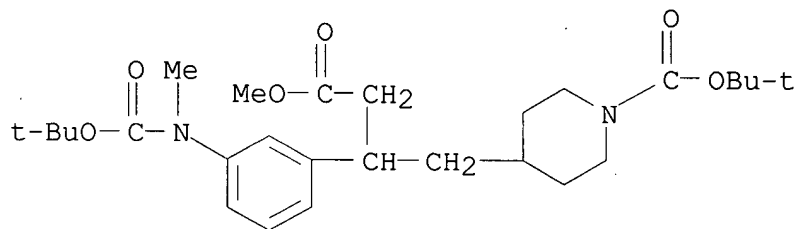
10/782,060

(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI)
(CA INDEX NAME)



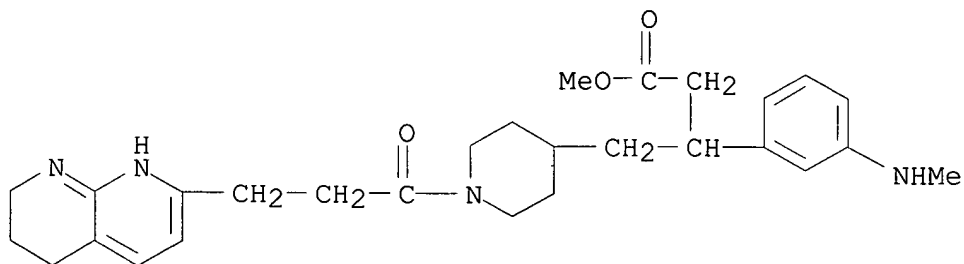
RN 669076-41-9 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-[3-
[[1,1-dimethylethoxy)carbonyl]methylamino]phenyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 669076-44-2 CAPLUS

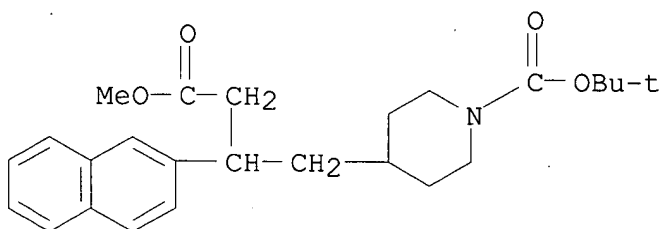
CN 4-Piperidinebutanoic acid, β-[3-(methylamino)phenyl]-1-[1-oxo-3-
(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI)
(CA INDEX NAME)



RN 669076-49-7 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-2-
naphthalenyl]-, methyl ester (9CI) (CA INDEX NAME)

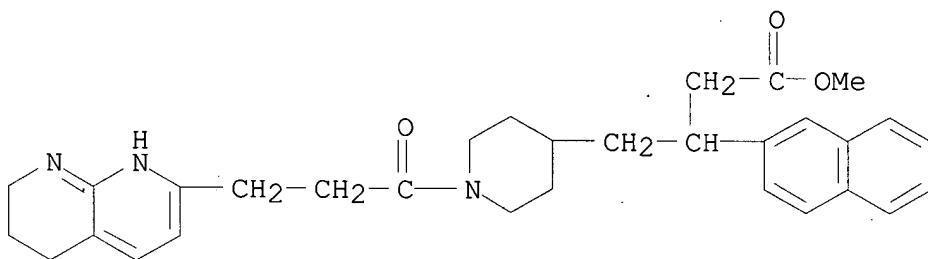
10/782,060



RN 669076-54-4 CAPLUS

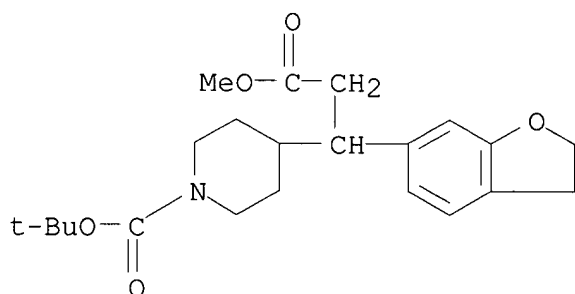
CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, methyl ester (9CI) (CA

INDEX
NAME)



RN 669076-74-8 CAPLUS

CN 4-Piperidinepropanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

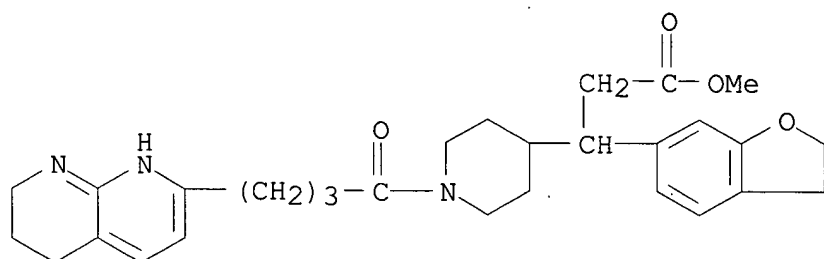


RN 669076-76-0 CAPLUS

CN 4-Piperidinepropanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-, methyl ester (9CI)

(CA
INDEX NAME)

10/782,060



IT 669076-68-0P 669076-69-1P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);

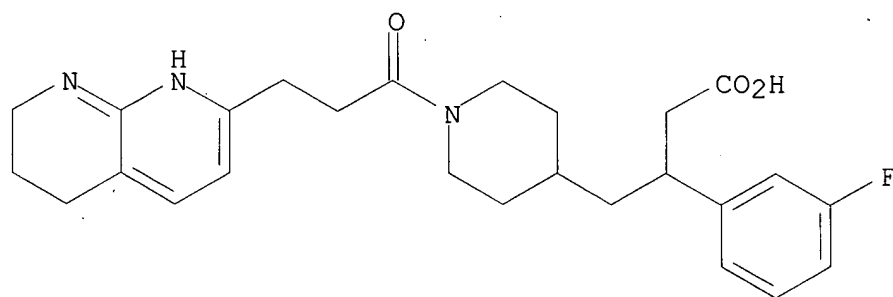
PREP (Preparation); USES (Uses)

(preparation of piperidinyl derivs. useful as $\alpha\text{v}\beta 3$ and $\alpha\text{v}\beta 5$ integrin receptor antagonists)

RN 669076-68-0 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (+)- (9CI) (CA INDEX NAME)

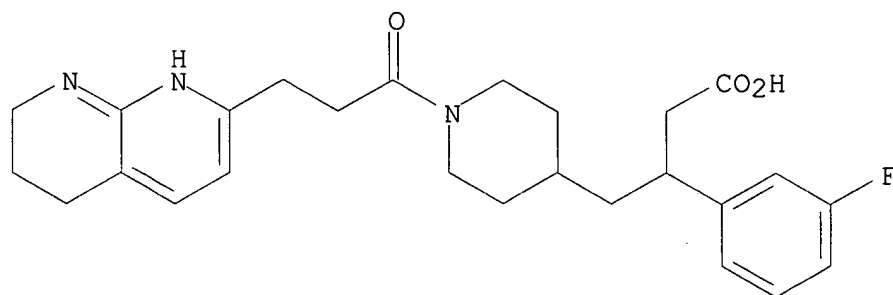
Rotation (+).



RN 669076-69-1 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



IT 669074-97-9P 669074-98-0P 669075-00-7P
 669075-01-8P 669075-02-9P 669075-03-0P
 669075-04-1P 669075-09-6P 669075-10-9P
 669075-11-0P 669075-12-1P 669075-17-6P
 669075-19-8P 669075-21-2P 669075-22-3P
 669075-23-4P 669075-24-5P 669075-27-8P
 669075-28-9P 669075-29-0P 669075-30-3P
 669075-31-4P 669075-38-1P 669075-39-2P
 669075-40-5P 669075-41-6P 669075-48-3P
 669075-49-4P 669075-50-7P 669075-51-8P
 669075-52-9P 669075-53-0P 669075-54-1P
 669075-55-2P 669075-56-3P 669075-57-4P
 669075-58-5P 669075-59-6P 669075-60-9P
 669075-61-0P 669075-62-1P 669075-63-2P
 669075-64-3P 669075-65-4P 669075-66-5P
 669075-67-6P 669075-68-7P 669075-69-8P
 669075-70-1P 669075-71-2P 669075-80-3P
 669075-81-4P 669075-82-5P 669075-83-6P
 669075-84-7P 669075-85-8P 669075-86-9P
 669075-93-8P 669076-01-1P 669076-02-2P
 669076-03-3P 669076-04-4P 669076-05-5P
 669076-06-6P 669076-07-7P 669076-08-8P
 669076-20-4P 669076-29-3P 669076-30-6P
 669076-38-4P 669076-45-3P 669076-46-4P
 669076-55-5P 669076-70-4P 669076-78-2P
 669076-79-3P 669076-80-6P 669076-81-7P
 669076-82-8P 669076-83-9P 669076-84-0P
 669076-85-1P 669076-86-2P 669076-87-3P
 669076-88-4P 669076-89-5P 669076-90-8P
 669076-91-9P 669076-92-0P 669076-93-1P
 669076-94-2P 669076-96-4P 669076-97-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidinyl derivs. useful as $\alpha\text{v}\beta\text{3}$ and $\alpha\text{v}\beta\text{5}$ integrin receptor antagonists)

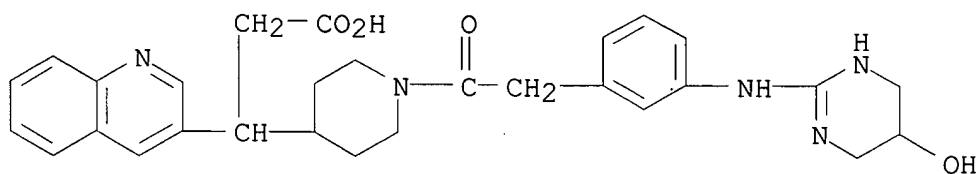
RN 669074-97-9 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]phenyl]acetyl]-4-piperidinyl]-, monohydrochloride

(9CI)

(CA INDEX NAME)

10/782,060



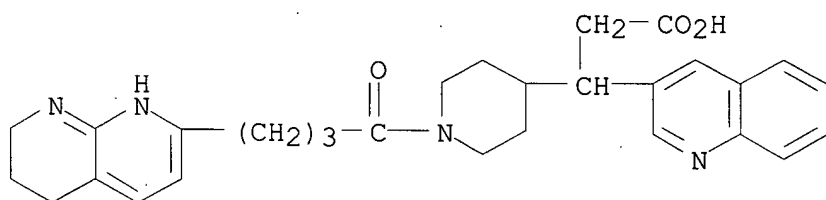
● HCl

RN 669074-98-0 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, hydrochloride (2:7) (9CI)

(CA

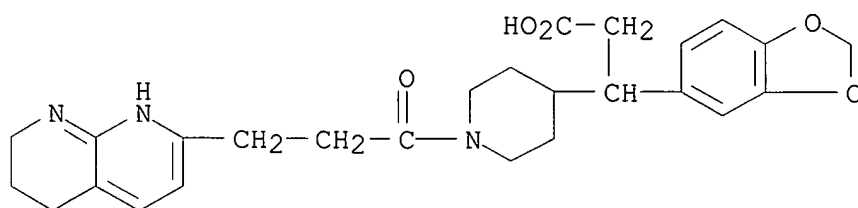
INDEX NAME)



● 7/2 HCl

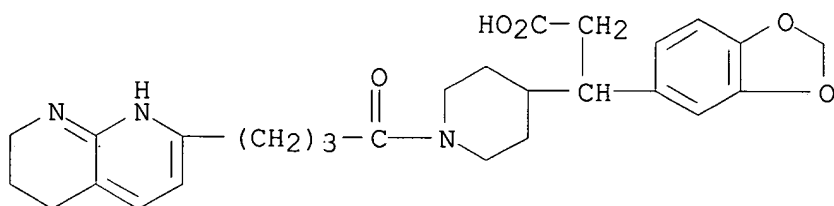
RN 669075-00-7 CAPLUS

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



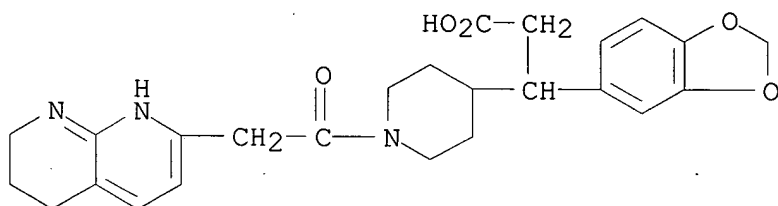
RN 669075-01-8 CAPLUS

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



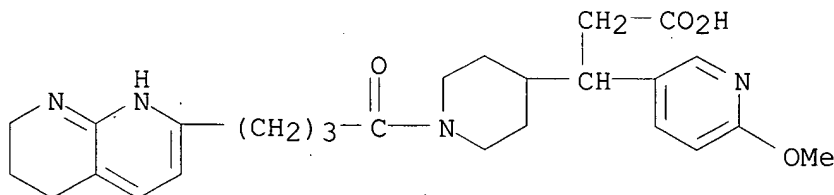
RN 669075-02-9 CAPLUS

CN 4-Piperidinepropanoic acid, β-1,3-benzodioxol-5-yl-1-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)



RN 669075-03-0 CAPLUS

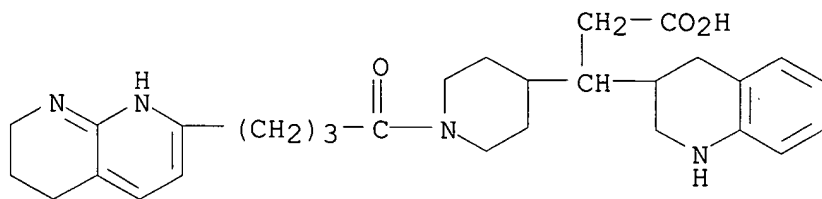
CN 3-Pyridinepropanoic acid, 6-methoxy-β-[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 669075-04-1 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-β-[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)

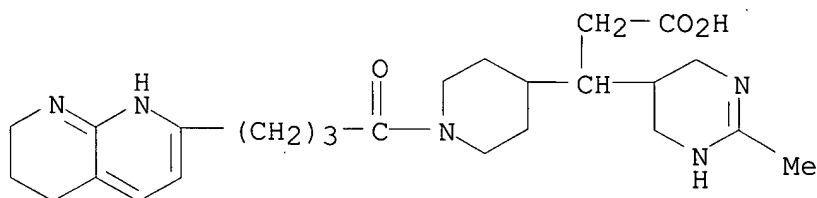
10/782,060



● HCl

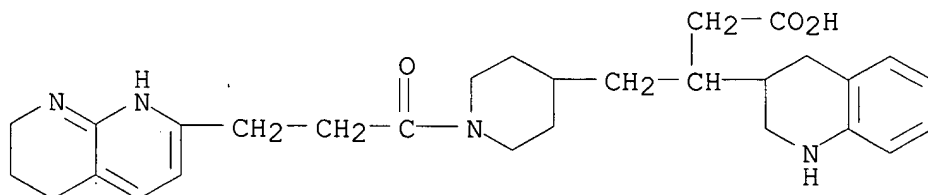
RN 669075-09-6 CAPLUS

CN 5-Pyrimidinepropanoic acid, 1,4,5,6-tetrahydro-2-methyl- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI)
(CA INDEX NAME)



RN 669075-10-9 CAPLUS

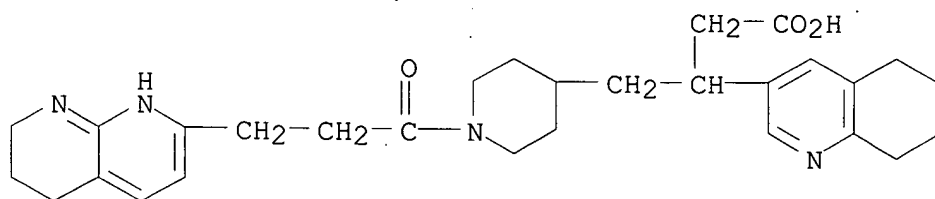
CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)
(CA INDEX NAME)



RN 669075-11-0 CAPLUS

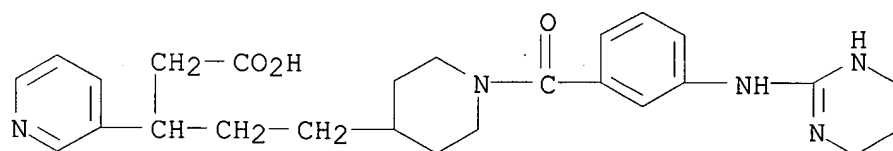
CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)
(CA INDEX NAME)

10/782,060



RN 669075-12-1 CAPLUS

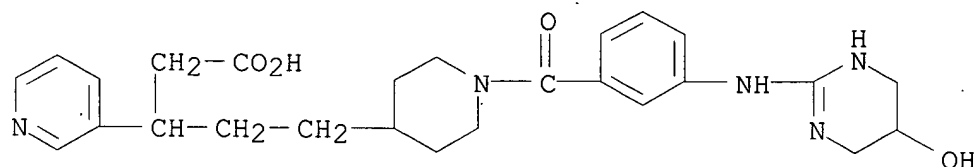
CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI)
(CA INDEX NAME)



● HCl

RN 669075-17-6 CAPLUS

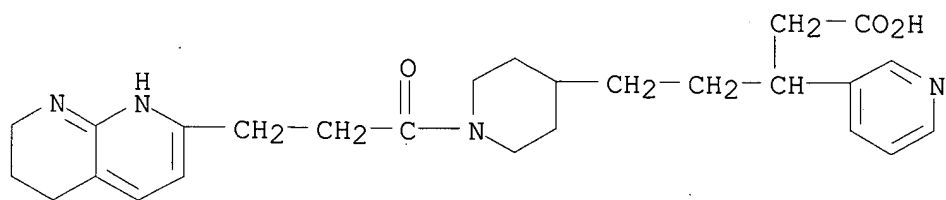
CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669075-19-8 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI)
(CA INDEX NAME)

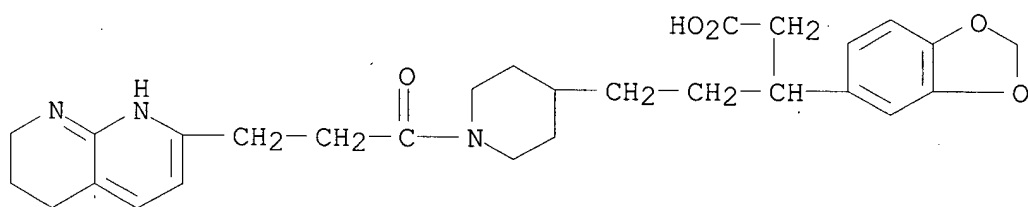
10/782,060



● HCl

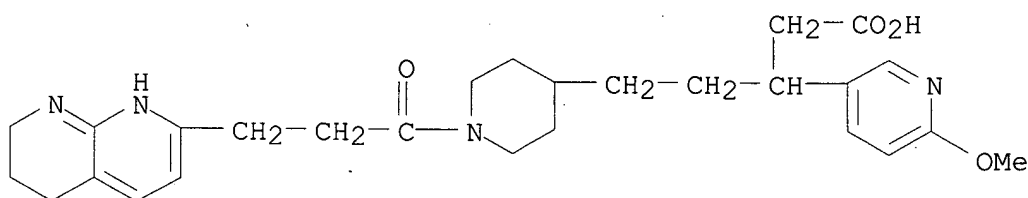
RN 669075-21-2 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-22-3 CAPLUS

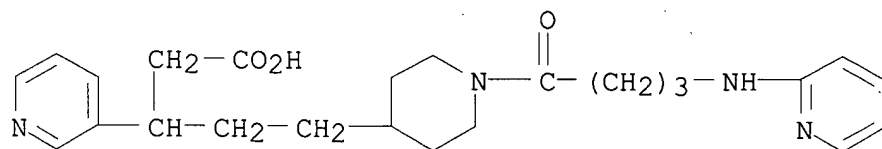
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]- (9CI)
(CA INDEX NAME)



RN 669075-23-4 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

10/782,060



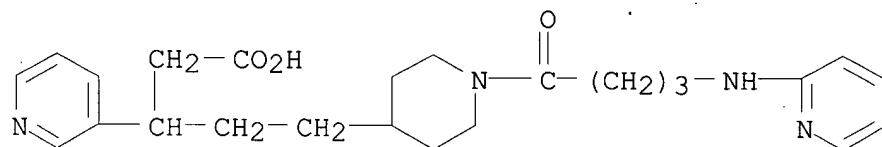
RN 669075-24-5 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 669075-23-4

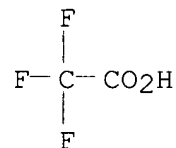
CMF C24 H32 N4 O3



CM 2

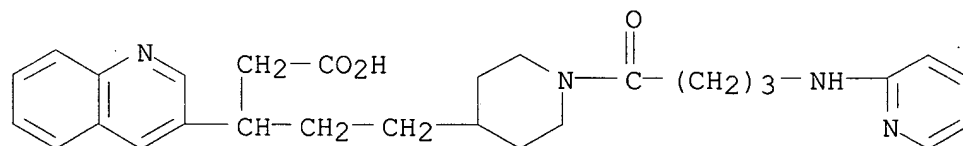
CRN 76-05-1

CMF C2 H F3 O2



RN 669075-27-8 CAPLUS

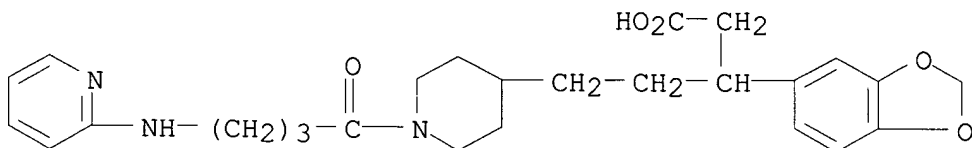
CN 3-Quinolinepropanoic acid, β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669075-28-9 CAPLUS

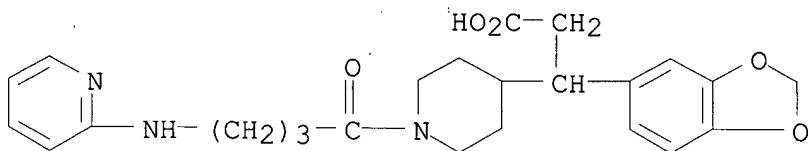
10/782,060

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(2-pyridinylamino)butyl]- (9CI) (CA INDEX NAME)



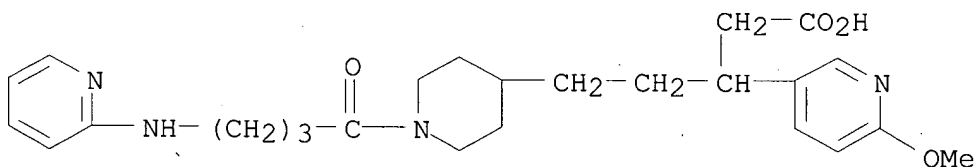
RN 669075-29-0 CAPLUS

CN 4-Piperidinepropanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(2-pyridinylamino)butyl]- (9CI) (CA INDEX NAME)



RN 669075-30-3 CAPLUS

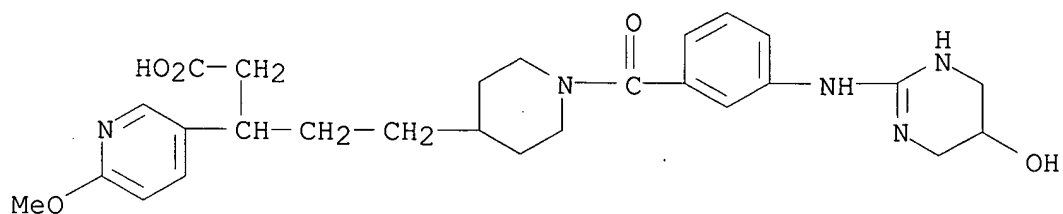
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[1-oxo-4-(2-pyridinylamino)butyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669075-31-4 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

10/782,060

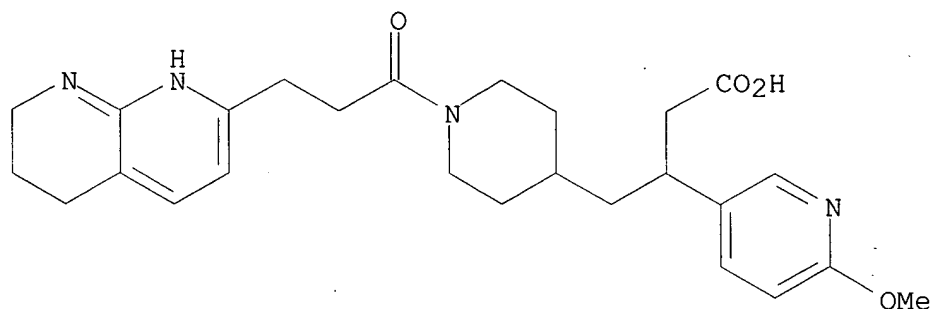


● HCl

RN 669075-38-1 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, (+)-(9CI) (CA INDEX NAME)

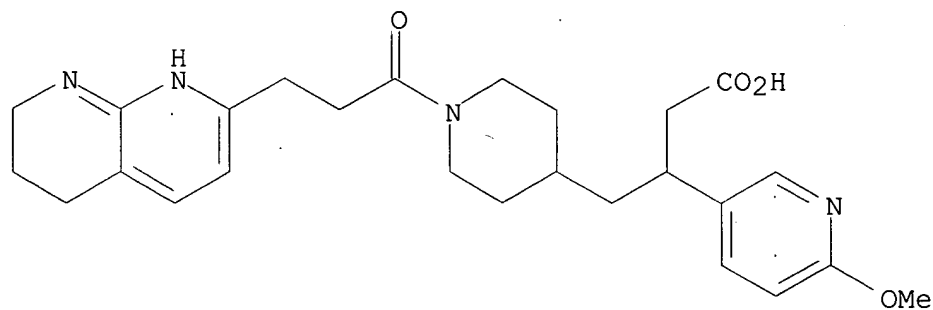
Rotation (+).



RN 669075-39-2 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, (-)-(9CI) (CA INDEX NAME)

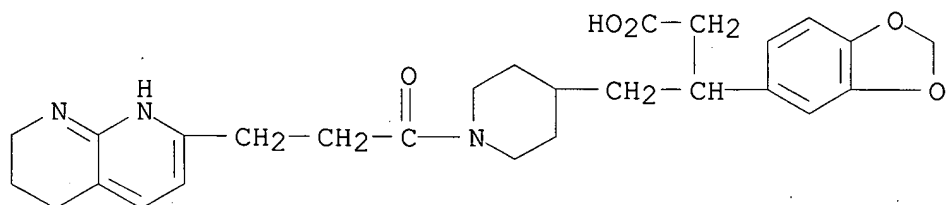
Rotation (-).



10/782,060

RN 669075-40-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



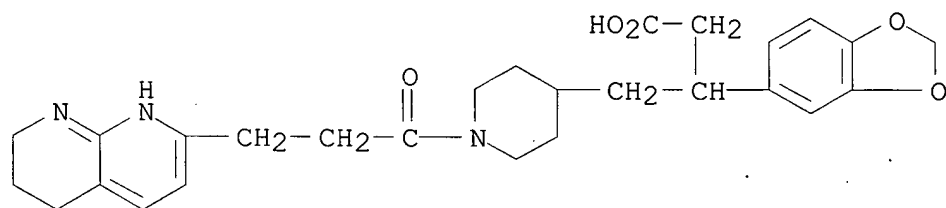
RN 669075-41-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-3-(5,6,7,8-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 669075-40-5

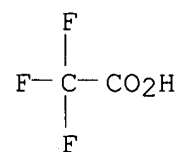
CMF C27 H33 N3 O5



CM 2

CRN 76-05-1

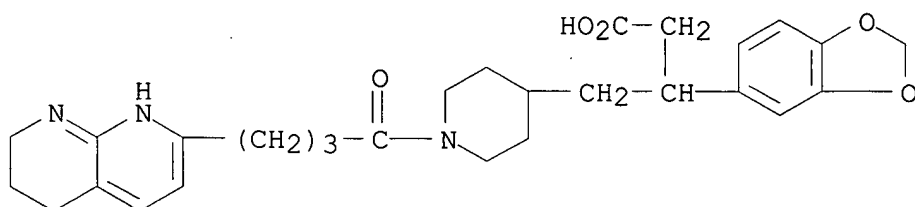
CMF C2 H F3 O2



RN 669075-48-3 CAPLUS

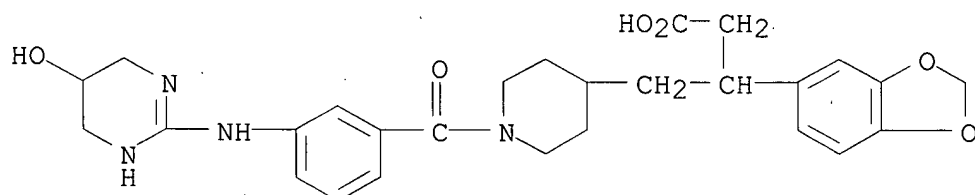
CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)

10/782,060



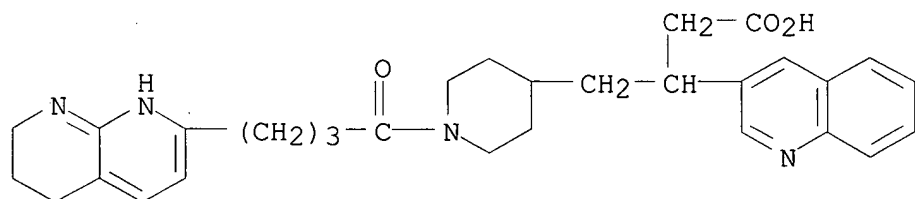
RN 669075-49-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



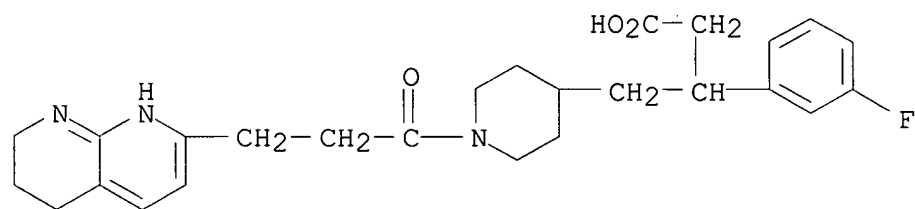
RN 669075-50-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669075-51-8 CAPLUS

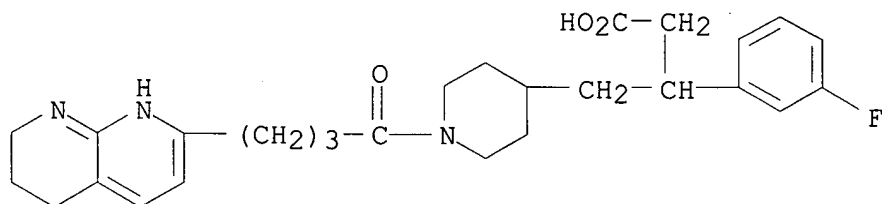
CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-52-9 CAPLUS

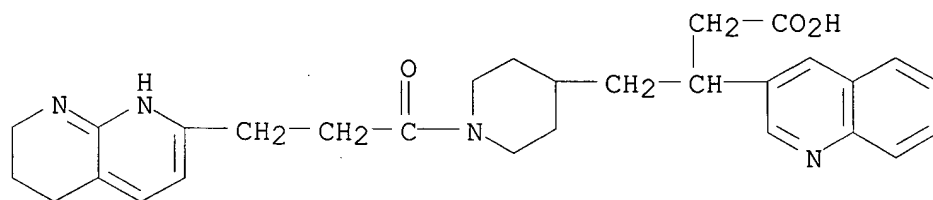
10/782,060

CN 4-Piperidinebutanoic acid, β -(3-fluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



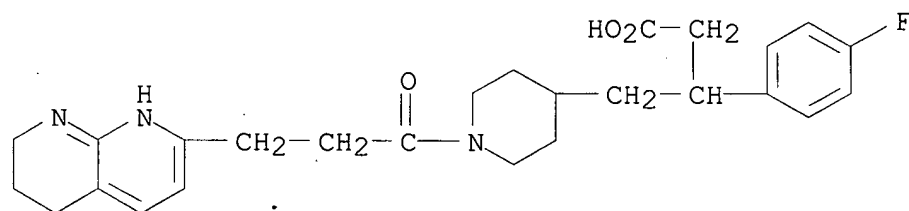
RN 669075-53-0 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669075-54-1 CAPLUS

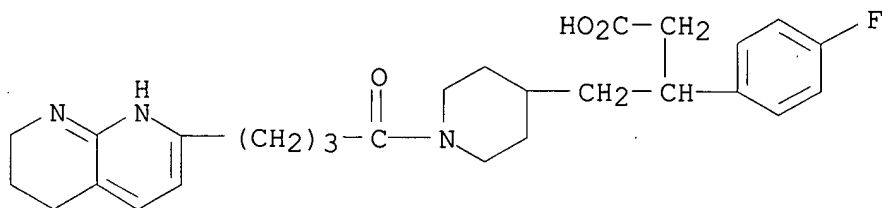
CN 4-Piperidinebutanoic acid, β -(4-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-55-2 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-fluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)

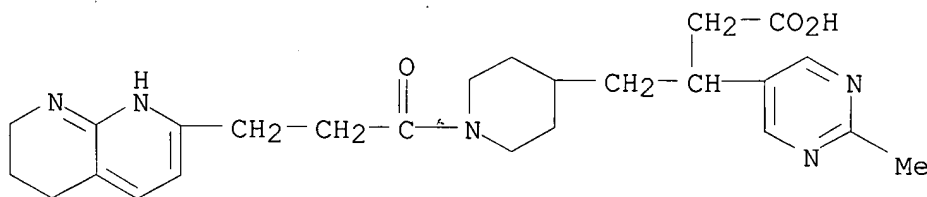
10/782,060



RN 669075-56-3 CAPLUS

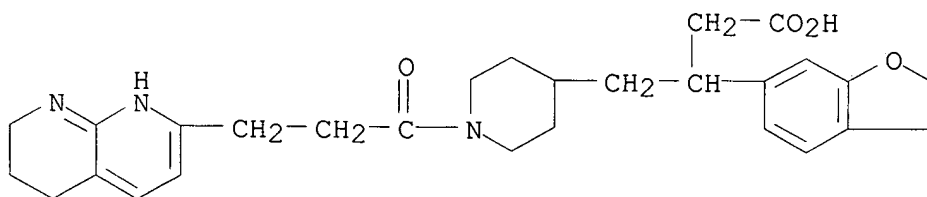
CN 5-Pyrimidinepropanoic acid, 2-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA INDEX NAME)



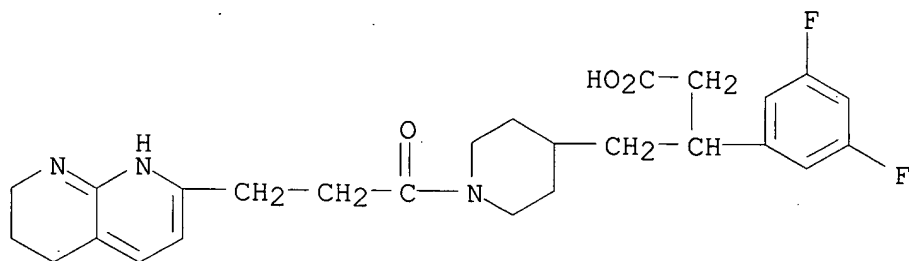
RN 669075-57-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



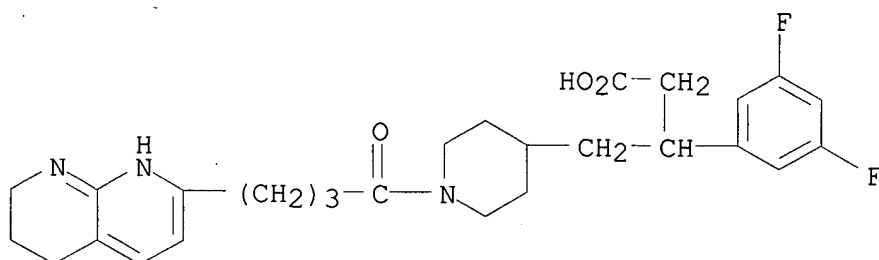
RN 669075-58-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3,5-difluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

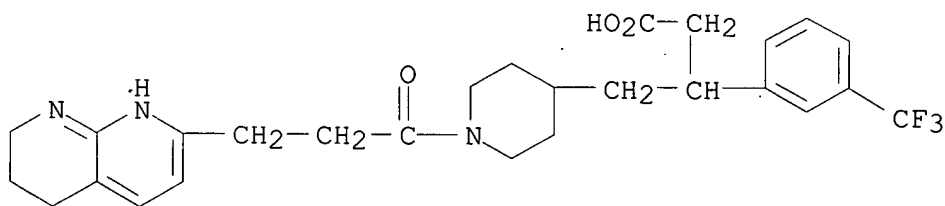


RN 669075-59-6 CAPLUS

CN 4-Piperidinebutanoic acid, β-(3,5-difluorophenyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)



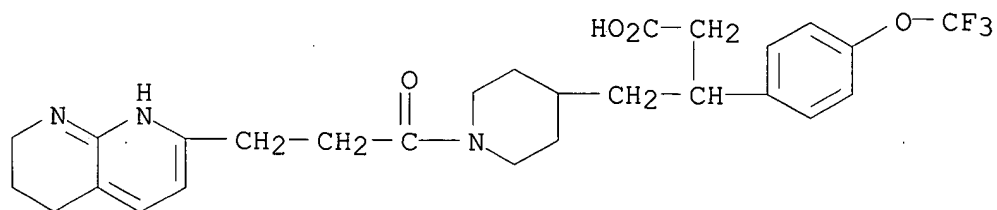
RN 669075-60-9 CAPLUS

CN 4-Piperidinebutanoic acid,
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-
2-yl)propyl]-β-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 669075-61-0 CAPLUS

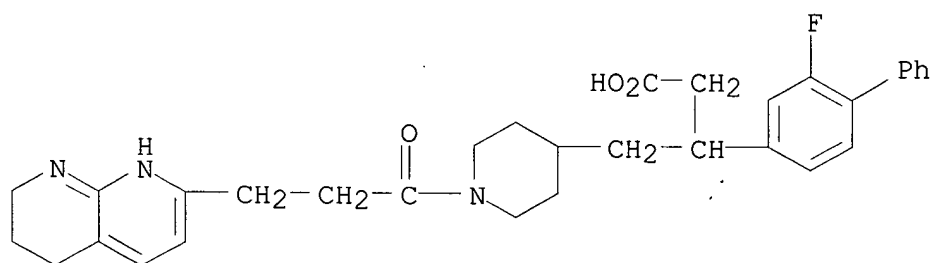
CN 4-Piperidinebutanoic acid,
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-
2-yl)propyl]-β-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

10/782,060



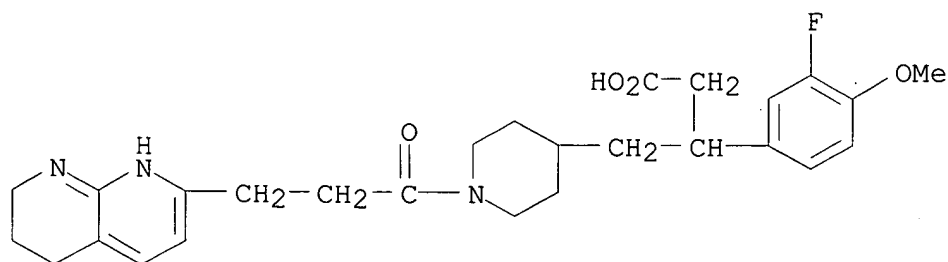
RN 669075-62-1 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2-fluoro[1,1'-biphenyl]-4-yl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-63-2 CAPLUS

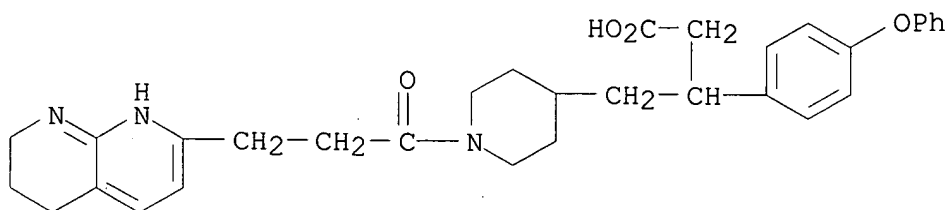
CN 4-Piperidinebutanoic acid, β -(3-fluoro-4-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669075-64-3 CAPLUS

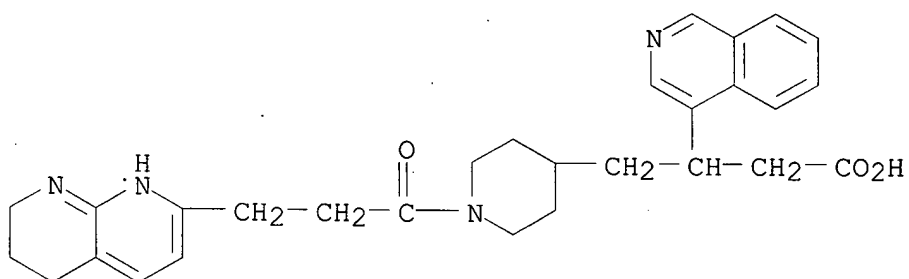
CN 4-Piperidinebutanoic acid, 1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

10/782,060



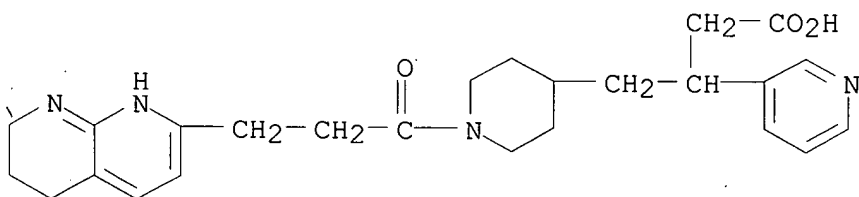
RN 669075-65-4 CAPLUS

CN 4-Isoquinolinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669075-66-5 CAPLUS

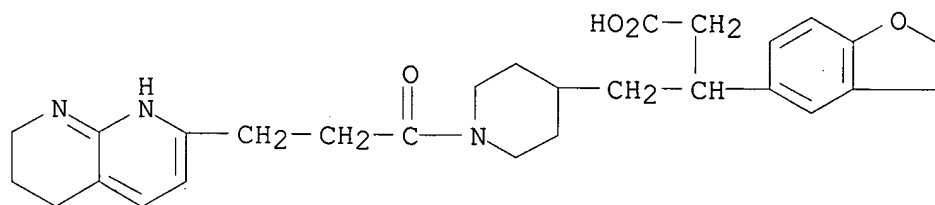
CN 3-Pyridinepropanoic acid, β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669075-67-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-5-benzofuranyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

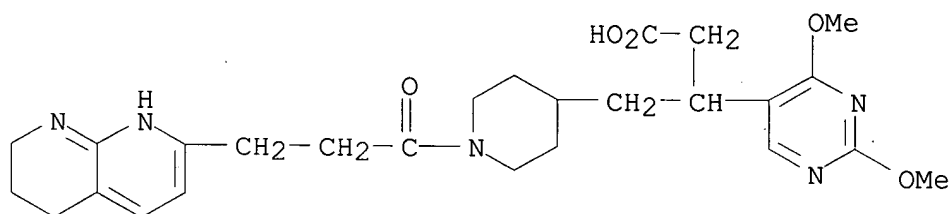
10/782,060



RN 669075-68-7 CAPLUS

CN 5-Pyrimidinepropanoic acid, 2,4-dimethoxy-β-[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

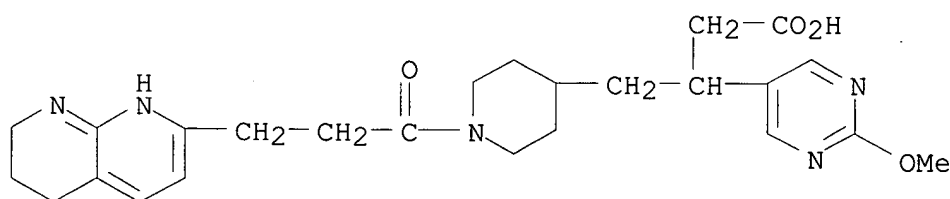
(CA
INDEX NAME)



RN 669075-69-8 CAPLUS

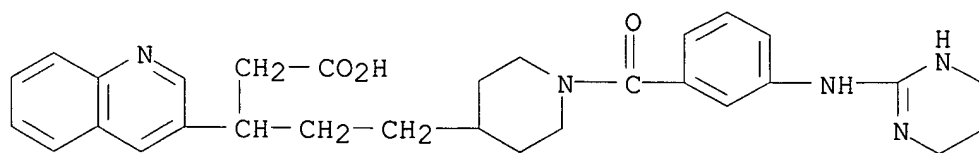
CN 5-Pyrimidinepropanoic acid, 2-methoxy-β-[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA
INDEX NAME)



RN 669075-70-1 CAPLUS

CN 3-Quinolinepropanoic acid, β-[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



10/782,060

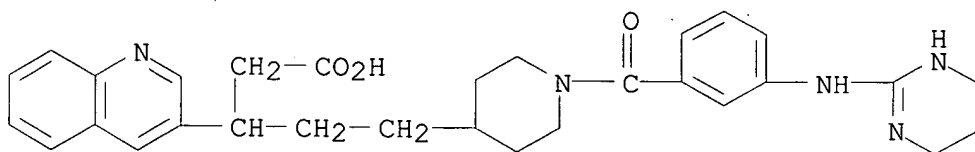
RN 669075-71-2 CAPLUS

CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]-, mono(trifluoroacetate)
(9CI) (CA INDEX NAME)

CM 1

CRN 669075-70-1

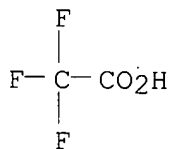
CMF C30 H35 N5 O3



CM 2

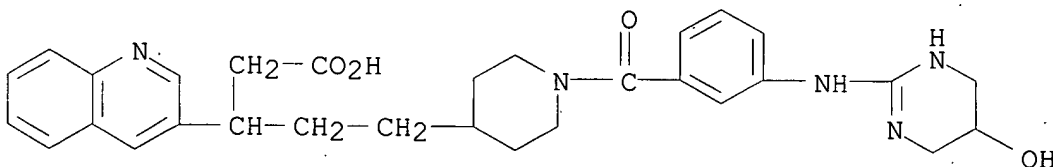
CRN 76-05-1

CMF C2 H F3 O2



RN 669075-80-3 CAPLUS

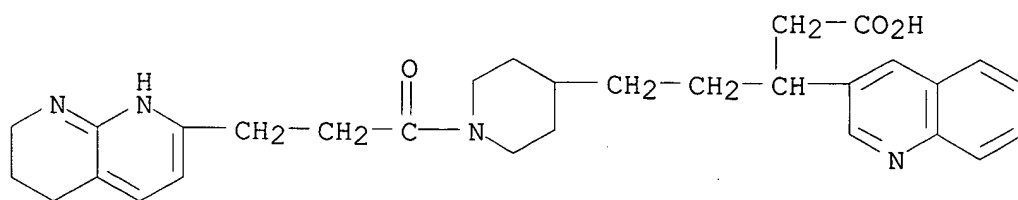
CN 3-Quinolinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669075-81-4 CAPLUS

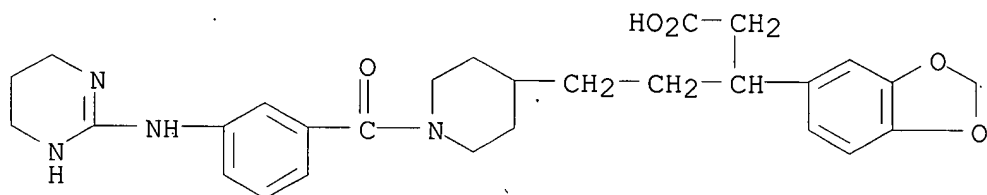
CN 3-Quinolinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

10/782,060



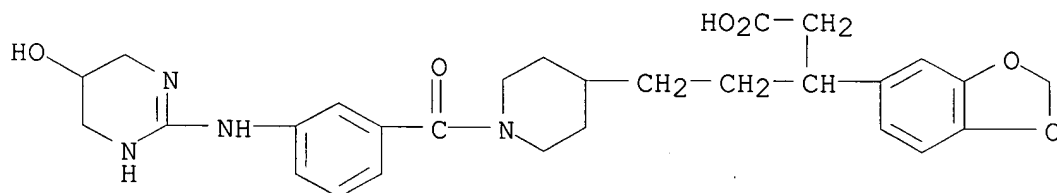
RN 669075-82-5 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



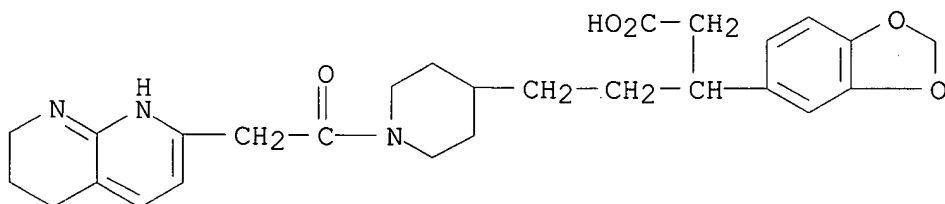
RN 669075-83-6 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 669075-84-7 CAPLUS

CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)acetyl]- (9CI) (CA INDEX NAME)

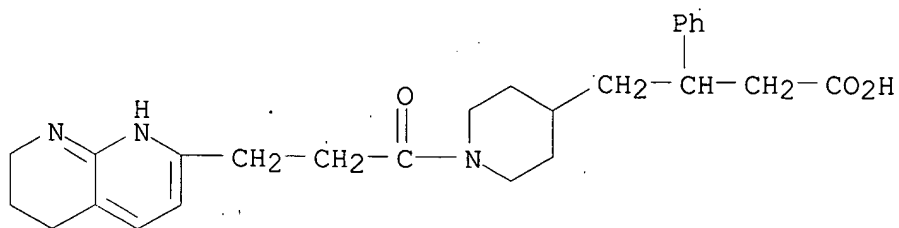


RN 669075-85-8 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-

10/782,060

2-yl)propyl]- β -phenyl- (9CI) (CA INDEX NAME)



RN 669075-86-9 CAPLUS

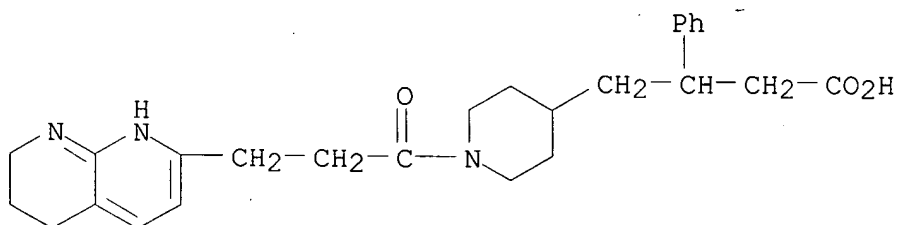
CN 4-Piperidinebutanoic acid,

1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 669075-85-8

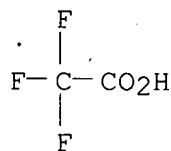
CMF C26 H33 N3 O3



CM 2

CRN 76-05-1

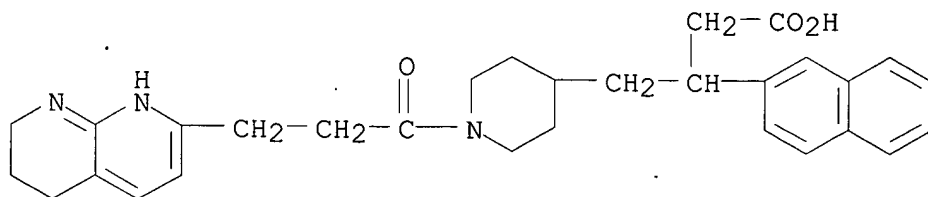
CMF C2 H F3 O2



RN 669075-93-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

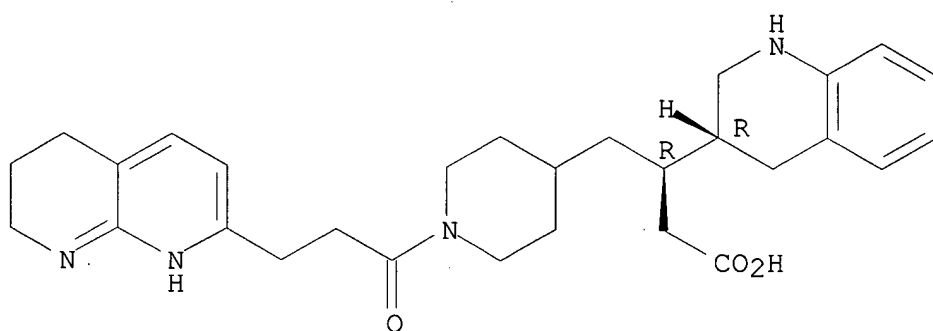
10/782,060



RN 669076-01-1 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, ($\beta R, 3R$)-rel-(+)-(9CI) (CA INDEX NAME)

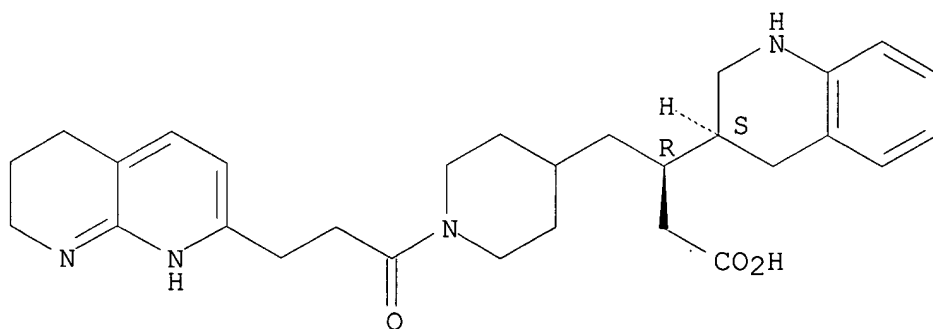
Rotation (+). Absolute stereochemistry unknown.



RN 669076-02-2 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, ($\beta R, 3S$)-rel-(+)-(9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.



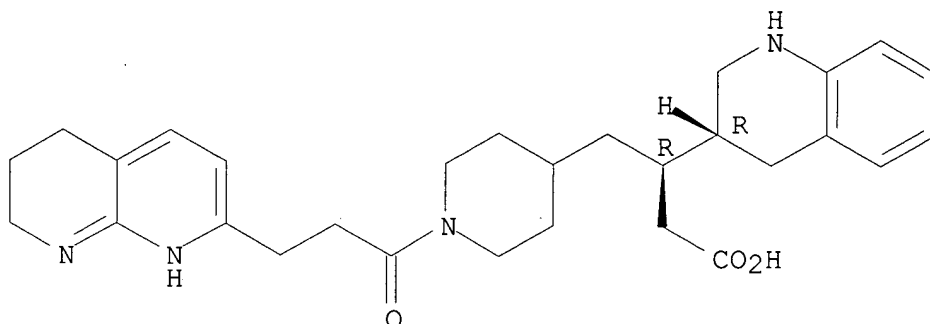
RN 669076-03-3 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidiny]methyl]-, ($\beta R, 3S$)-rel-(+)-(9CI) (CA INDEX NAME)

10/782,060

(β R,3R)-rel-(-)-(9CI) (CA INDEX NAME)

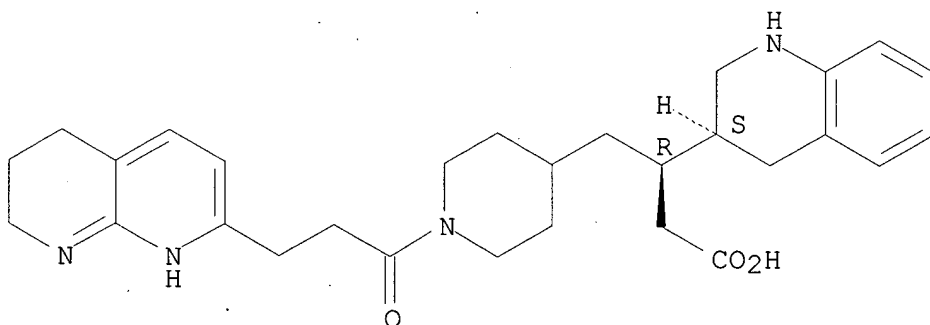
Rotation (-). Absolute stereochemistry unknown.



RN 669076-04-4 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]-, (β R,3S)-rel-(-)-(9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

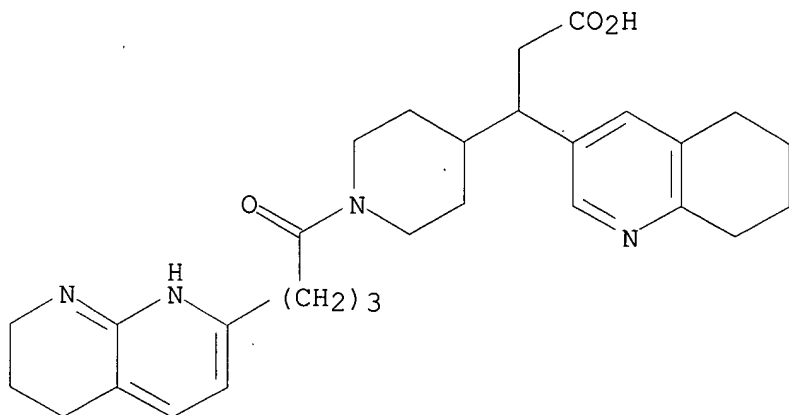


RN 669076-05-5 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, (+)-(9CI)
(CA INDEX NAME)

Rotation (+).

10/782,060



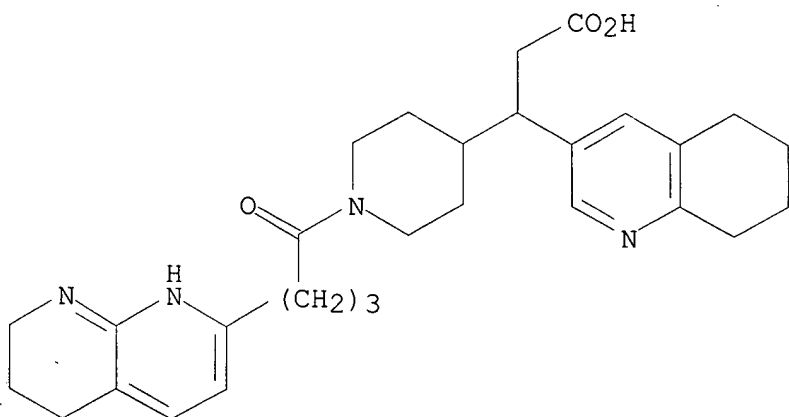
RN 669076-06-6 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]-, (-)- (9CI)

(CA

INDEX NAME)

Rotation (-).



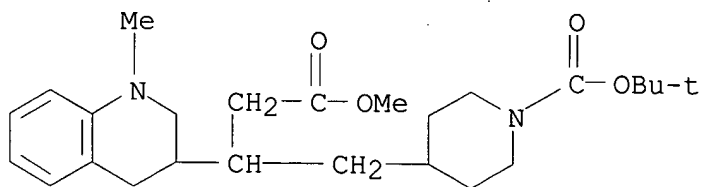
RN 669076-07-7 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-1-methyl-, methyl ester (9CI)

(CA

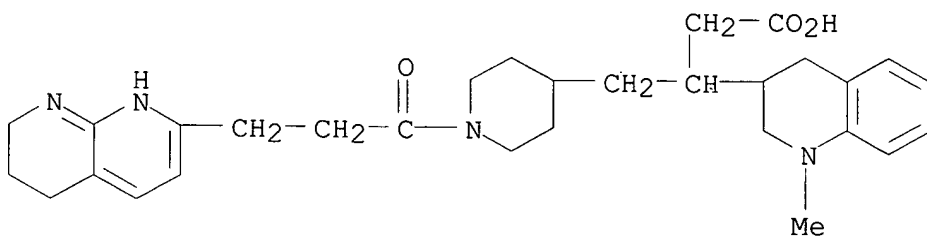
INDEX NAME)

10/782,060



RN 669076-08-8 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro-1-methyl- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl)methyl]-
(9CI) (CA INDEX NAME)



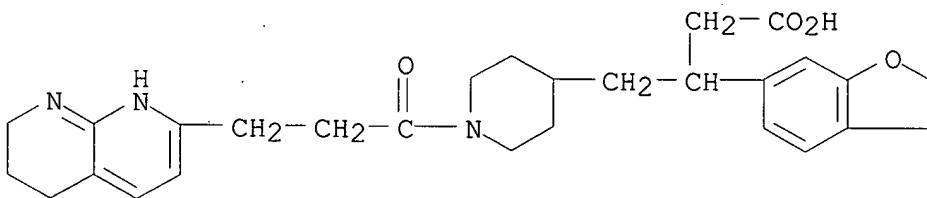
RN 669076-20-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-3-(5,6,7,8-tetrahydro-1,8-naphthyridin-2-yl)propyl]-,
mono(trifluoroacetate)
(9CI) (CA INDEX NAME)

CM 1

CRN 669075-57-4

CMF C28 H35 N3 O4

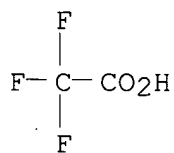


CM 2

CRN 76-05-1

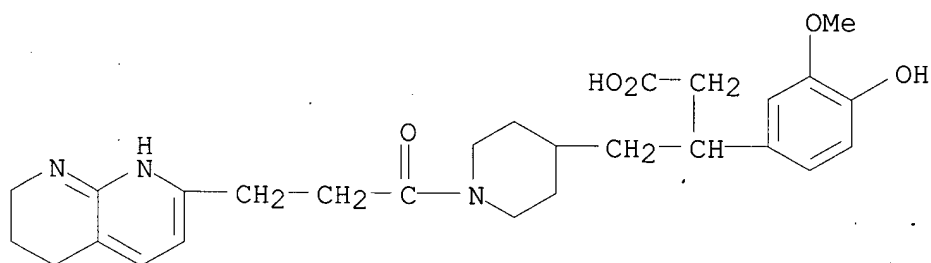
CMF C2 H F3 O2

10/782,060



RN 669076-29-3 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



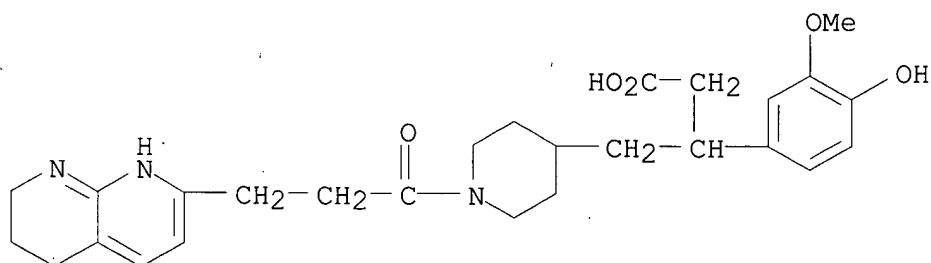
RN 669076-30-6 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-hydroxy-3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 669076-29-3

CMF C27 H35 N3 O5

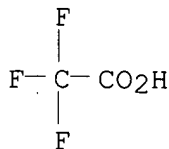


CM 2

CRN 76-05-1

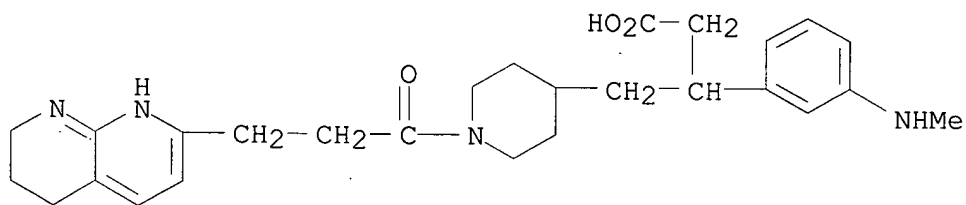
CMF C2 H F3 O2

10/782,060



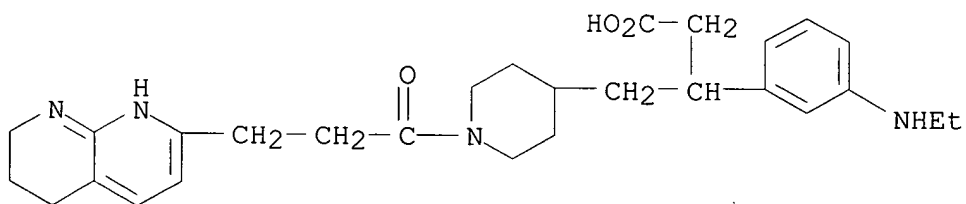
RN 669076-38-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -[3-(methylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669076-45-3 CAPLUS

CN 4-Piperidinebutanoic acid, β -[3-(ethylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)

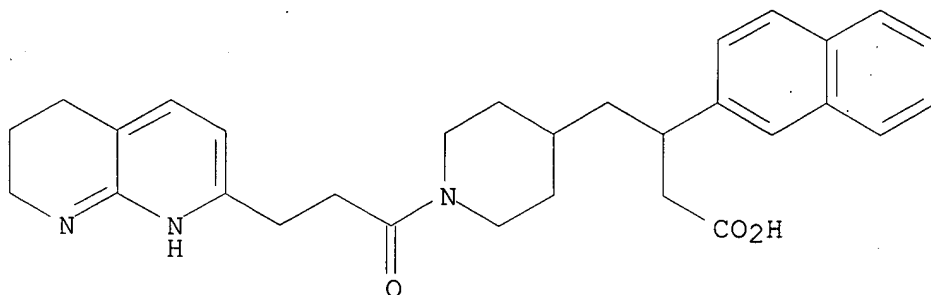


RN 669076-46-4 CAPLUS

CN 4-Piperidinebutanoic acid, β -2-naphthalenyl-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-, (-)- (9CI) (CA INDEX NAME)

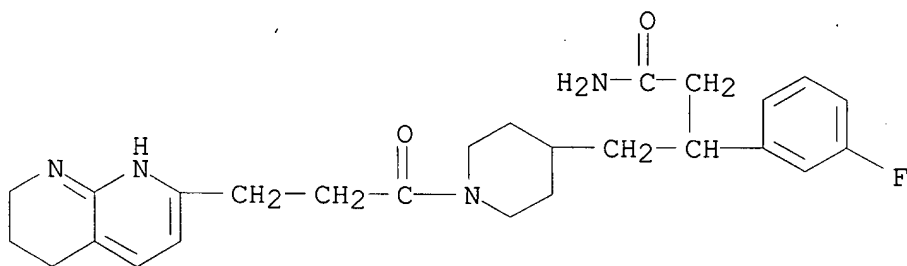
Rotation (-).

10/782,060



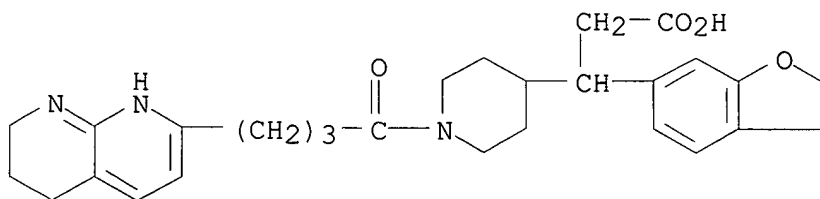
RN 669076-55-5 CAPLUS

CN 4-Piperidinebutanamide, β -(3-fluorophenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



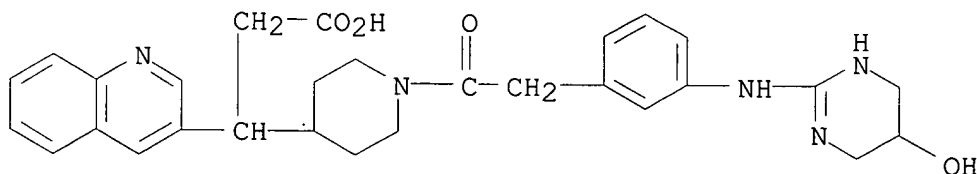
RN 669076-70-4 CAPLUS

CN 4-Piperidinepropanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]- (9CI) (CA INDEX NAME)

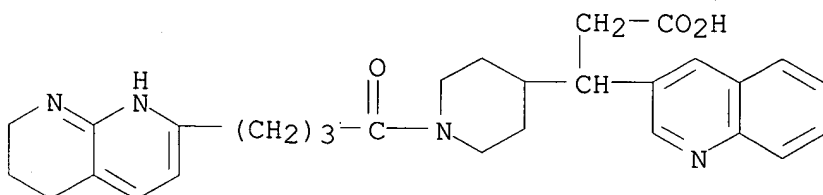


RN 669076-78-2 CAPLUS

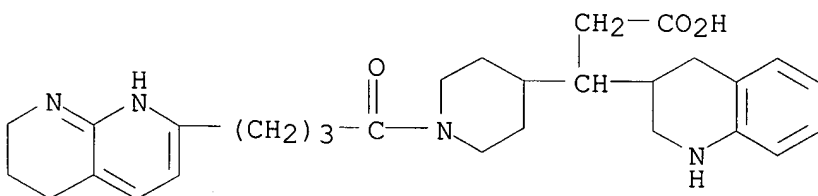
CN 3-Quinolinepropanoic acid, β -[1-[[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]phenyl]acetyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



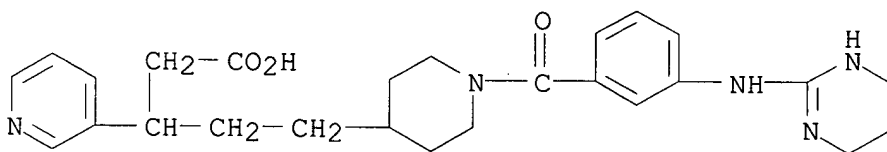
RN 669076-79-3 CAPLUS

CN 3-Quinolinepropanoic acid, β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 669076-80-6 CAPLUS

CN 3-Quinolinepropanoic acid, 1,2,3,4-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)INDEX
NAME)

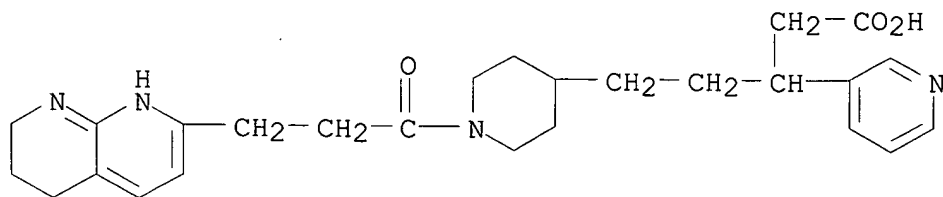
RN 669076-81-7 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[3-[(1,4,5,6-tetrahydro-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 669076-82-8 CAPLUS

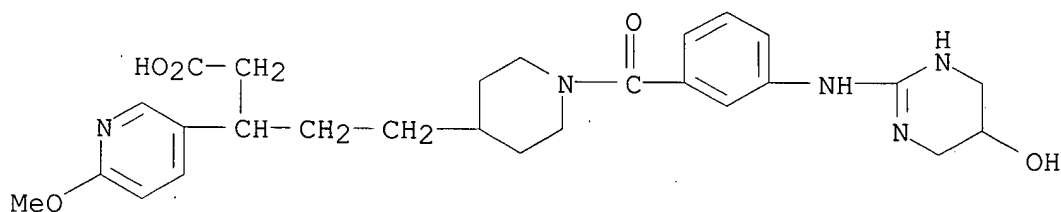
CN 3-Pyridinepropanoic acid, β -[2-[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

10/782,060



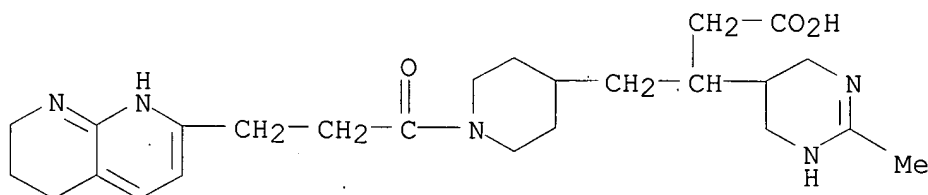
RN 669076-83-9 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy-β-[2-[1-[3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]benzoyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 669076-84-0 CAPLUS

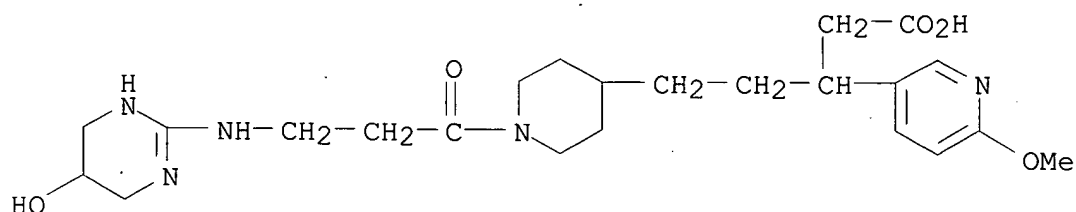
CN 5-Pyrimidinepropanoic acid, 1,4,5,6-tetrahydro-2-methyl-β-[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI) (CA INDEX NAME)



RN 669076-85-1 CAPLUS

CN 3-Pyridinepropanoic acid, 6-methoxy-β-[2-[1-[1-oxo-3-[(1,4,5,6-tetrahydro-5-hydroxy-2-pyrimidinyl)amino]propyl]-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

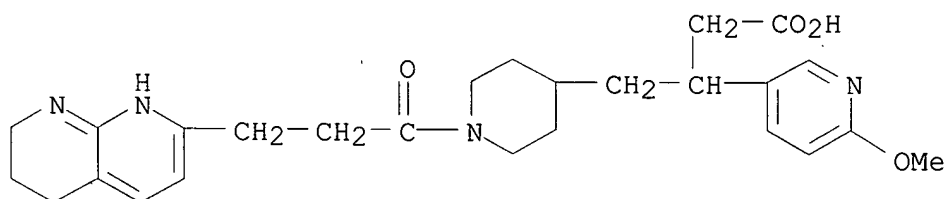
10/782,060



RN 669076-86-2 CAPLUS

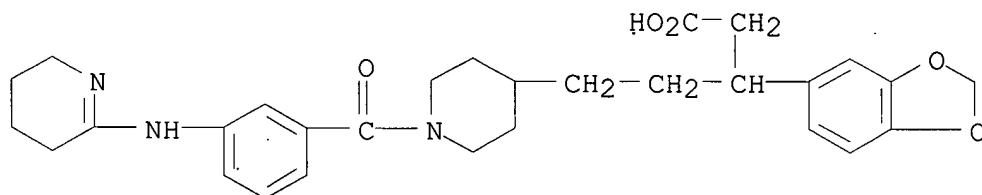
CN 3-Pyridinepropanoic acid, 6-methoxy- β -[[1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]-4-piperidinyl]methyl]- (9CI)

(CA INDEX NAME)



RN 669076-87-3 CAPLUS

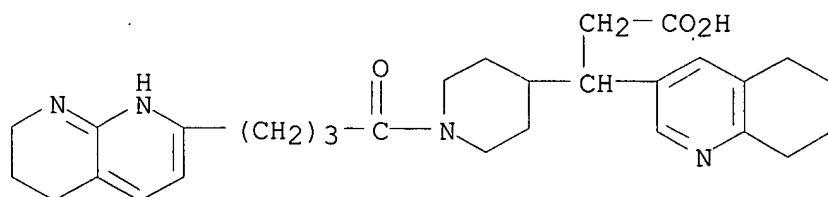
CN 4-Piperidinepentanoic acid, β -1,3-benzodioxol-5-yl-1-[3-[(3,4,5,6-tetrahydro-2-pyridinyl)amino]benzoyl]- (9CI) (CA INDEX NAME)



RN 669076-88-4 CAPLUS

CN 3-Quinolinepropanoic acid, 5,6,7,8-tetrahydro- β -[1-[1-oxo-4-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)butyl]-4-piperidinyl]- (9CI) (CA

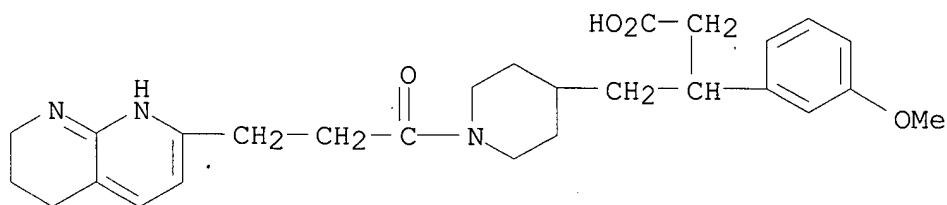
INDEX NAME)



10/782,060

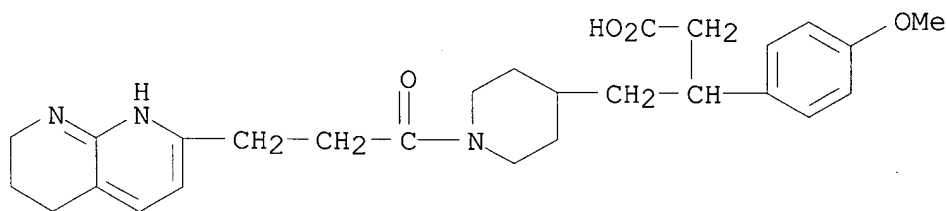
RN 669076-89-5 CAPLUS

CN 4-Piperidinebutanoic acid, β -(3-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



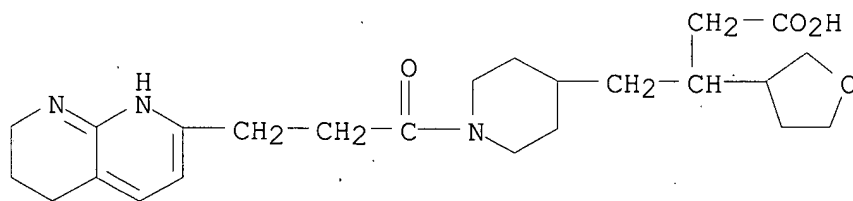
RN 669076-90-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -(4-methoxyphenyl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX NAME)



RN 669076-91-9 CAPLUS

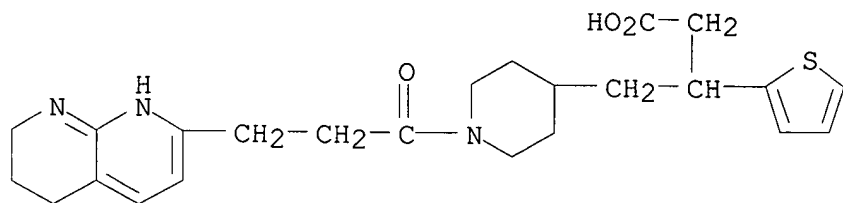
CN 4-Piperidinebutanoic acid,
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -(tetrahydro-3-furanyl)- (9CI) (CA INDEX NAME)



RN 669076-92-0 CAPLUS

CN 4-Piperidinebutanoic acid,
1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- β -2-thienyl- (9CI) (CA INDEX NAME)

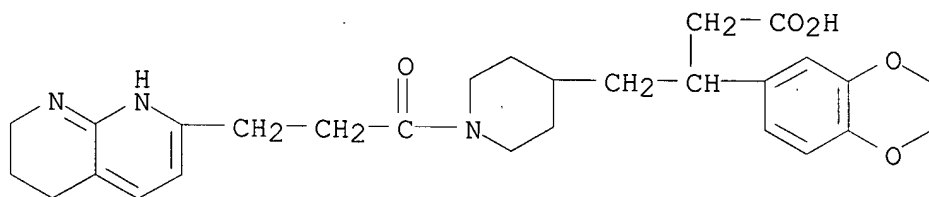
10/782,060



RN 669076-93-1 CAPLUS

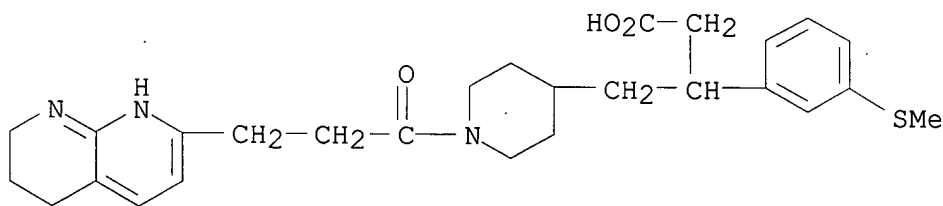
CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-1,4-benzodioxin-6-yl)-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA

INDEX
NAME)



RN 669076-94-2 CAPLUS

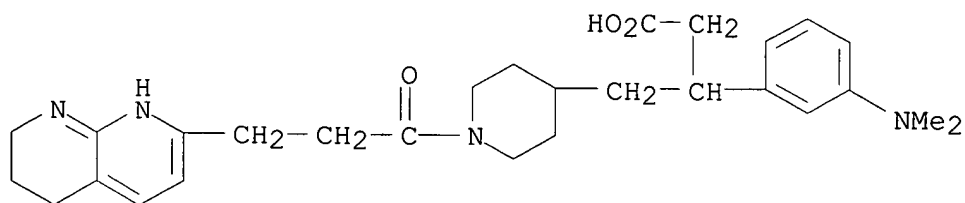
CN 4-Piperidinebutanoic acid, β -[3-(methylthio)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX
NAME)



RN 669076-96-4 CAPLUS

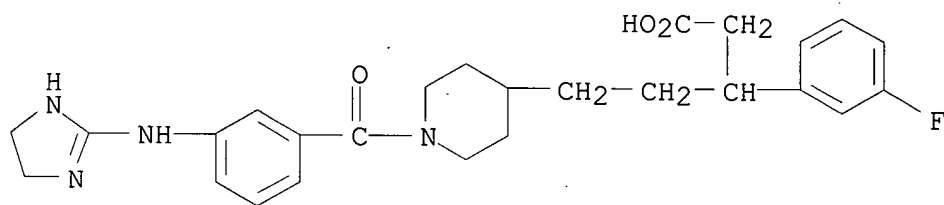
CN 4-Piperidinebutanoic acid, β -[3-(dimethylamino)phenyl]-1-[1-oxo-3-(1,5,6,7-tetrahydro-1,8-naphthyridin-2-yl)propyl]- (9CI) (CA INDEX
NAME)

10/782,060



RN 669076-97-5 CAPLUS

CN 4-Piperidinepentanoic acid, 1-[3-[(4,5-dihydro-1H-imidazol-2-yl)amino]benzoyl]-β-(3-fluorophenyl)- (9CI) (CA INDEX NAME)



IT 669075-36-9P 669075-37-0P 669075-97-2P

669075-98-3P 669075-99-4P 669076-00-0P

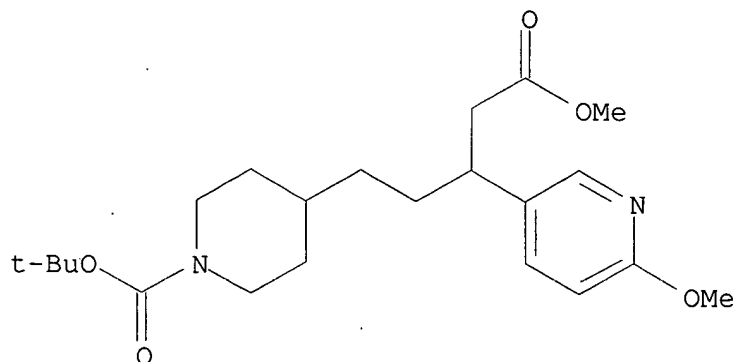
669076-25-9P 669076-51-1P

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of piperidinyll derivs. useful as αvβ3 and αvβ5 integrin receptor antagonists)

RN 669075-36-9 CAPLUS

CN 3-Pyridinepropanoic acid, β-[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyll]ethyl]-6-methoxy-, methyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

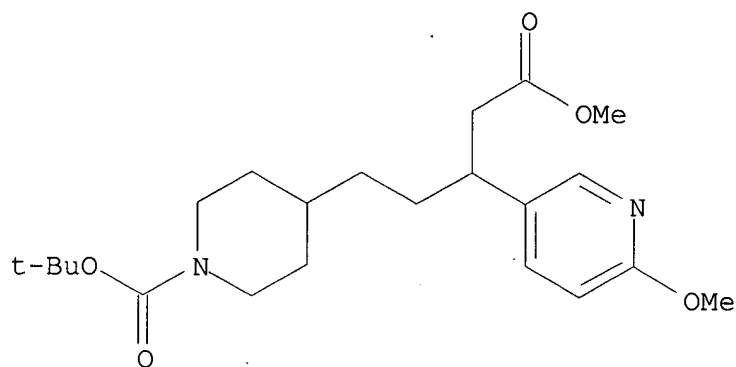


10/782,060

RN 669075-37-0 CAPLUS

CN 3-Pyridinepropanoic acid, β -[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]ethyl]-6-methoxy-, methyl ester, (-)- (9CI) (CA INDEX NAME)

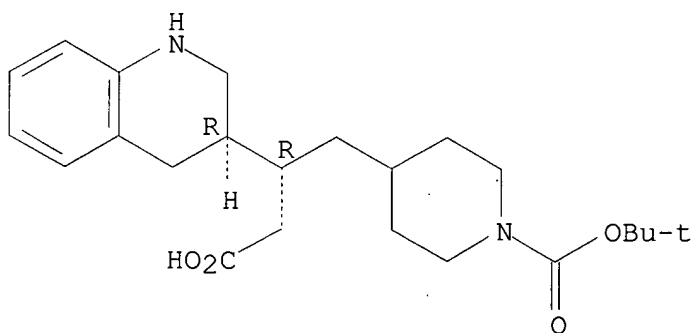
Rotation (-).



RN 669075-97-2 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, (β R,3R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown..

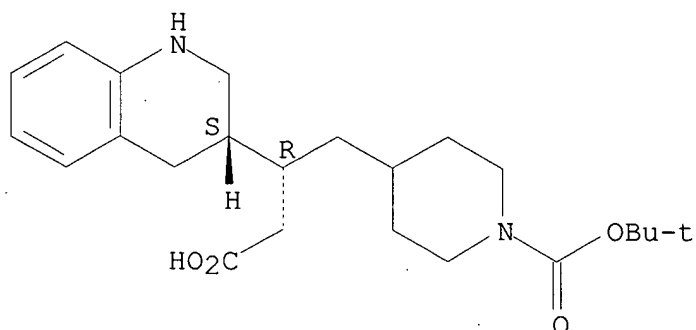


RN 669075-98-3 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, (β R,3S)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

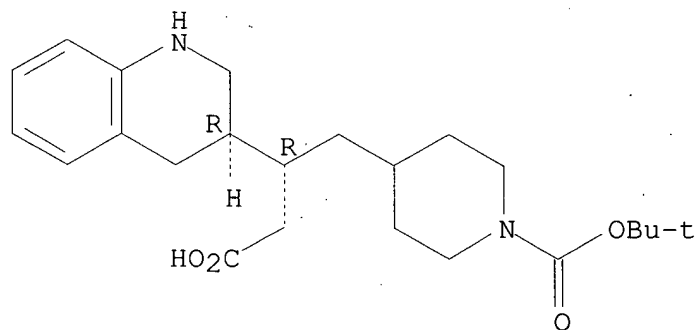
10/782,060



RN 669075-99-4 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, (β R,3R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

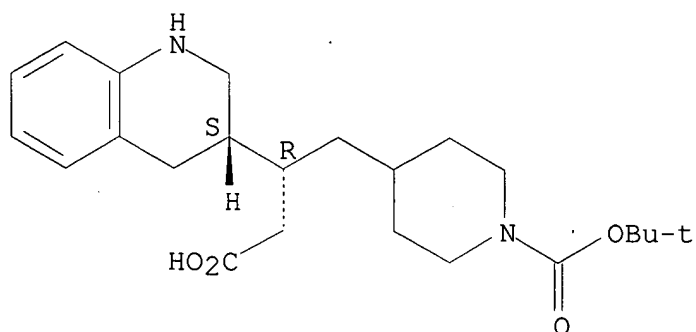


RN 669076-00-0 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-1,2,3,4-tetrahydro-, (β R,3S)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

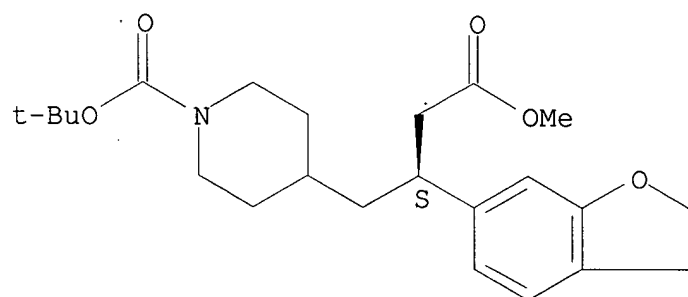
10/782,060



RN 669076-25-9 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester, (β S)-(9CI) (CA INDEX NAME)

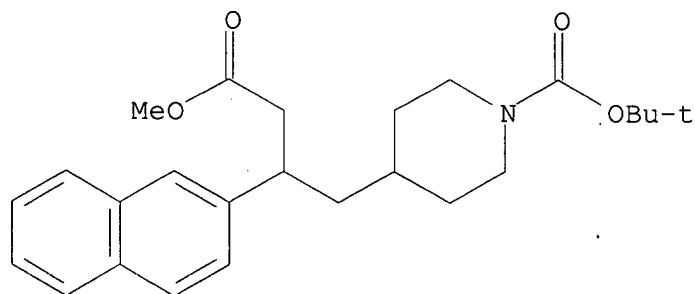
Absolute stereochemistry.



RN 669076-51-1 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -2-naphthalenyl-, methyl ester, (-)-(9CI) (CA INDEX NAME)

Rotation (-).



IT 669076-24-8P 669076-50-0P

RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP

10/782,060

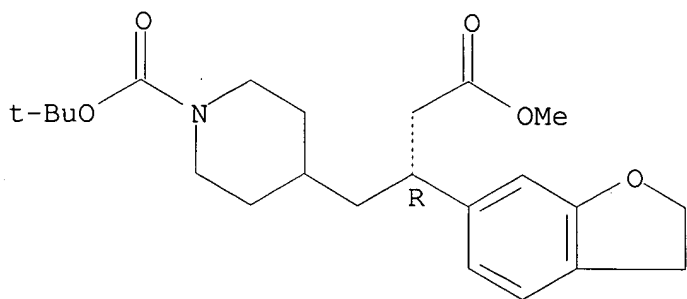
(Preparation)

(preparation of piperidiny l derivs. useful as $\alpha\text{v}\beta 3$ and $\alpha\text{v}\beta 5$ integrin receptor antagonists)

RN 669076-24-8 CAPLUS

CN 4-Piperidinebutanoic acid, β -(2,3-dihydro-6-benzofuranyl)-1-[(1,1-dimethylethoxy)carbonyl]-, methyl ester, (βR)- (9CI) (CA INDEX NAME)

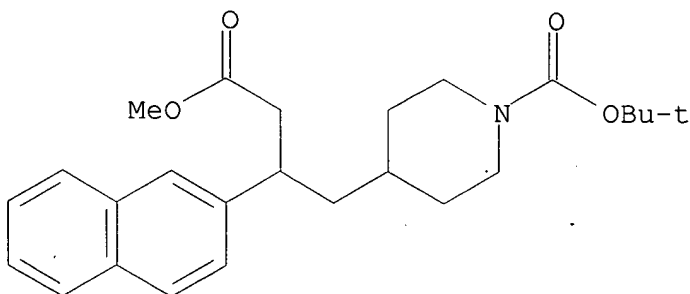
Absolute stereochemistry.



RN 669076-50-0 CAPLUS

CN 4-Piperidinebutanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -2-naphthalenyl-, methyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



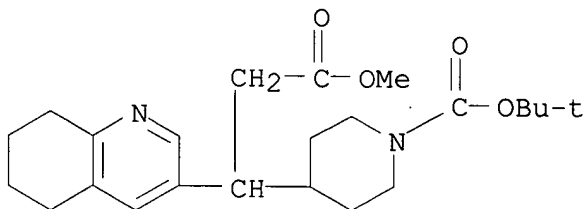
IT 669075-06-3P 669075-96-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of piperidiny l derivs. useful as $\alpha\text{v}\beta 3$ and $\alpha\text{v}\beta 5$ integrin receptor antagonists)

RN 669075-06-3 CAPLUS

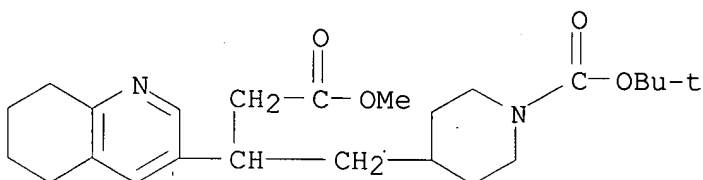
CN 3-Quinolinepropanoic acid, β -[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidiny l]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)

10/782,060



RN 669075-96-1 CAPLUS

CN 3-Quinolinepropanoic acid, β -[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]methyl]-5,6,7,8-tetrahydro-, methyl ester (9CI) (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to piperidinyl derivs. of formula I [wherein: Y = C(O)W or W; W = C0-6 alkyl, C0-6 alkylaryl, etc.; X = (CH2)n, n = 0-3; Z =

OH, NH2, NH-C1-8alkyl, alkoxy, etc.; R = H, alk(en/yn)yl, cycloalkyl, heterocyclyl, (hetero)aryl] that selectively bind integrin receptors. Compds. I are useful for the treatment of α v integrin-mediated disorders such as cancer-associated pathologies, atherosclerosis, bone resorption, muscular degeneration, etc. In vitro solid phase α v β 3, α v β 5, and GP IIb/IIIa binding assay methods were performed. For instance, compound II (α v β 3 IC50 = 0.056, α v β 5 IC50 > 5, α IIb β 3 IC50 = 4.33) was prepared via amidation of pyrimidine III by piperidine derivative IV, hydrolysis,

and

subsequent catalytic hydrogenation of obtained piperidine V (no yield data).

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

10/782,060

ACCESSION NUMBER: 2004:41441 CAPLUS
DOCUMENT NUMBER: 140:93935
TITLE: N-benzyl-3-phenyl-3-heterocyclyl-propionamide
inhibitors
compounds as tachykinin/serotonin reuptake
INVENTOR(S): Alvaro, Giuseppe; Cardullo, Francesca; D'adamo,
Lucilla; Piga, Elisabetta; Seri, Catia
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005255	A1	20040115	WO 2003-EP7126	20030702
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003281220	A1	20040123	AU 2003-281220	20030702
EP 1517894	A1	20050330	EP 2003-740413	20030702
EP 1517894	B1	20060906		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006501182	T	20060112	JP 2004-518695	20030702
AT 338748	T	20060915	AT 2003-740413	20030702
US 2006058348	A1	20060316	US 2005-521159	20050811
PRIORITY APPLN. INFO.:			GB 2002-15392	A 20020703
			WO 2003-EP7126	W 20030702

OTHER SOURCE(S): MARPAT 140:93935

IT 645378-25-2P, 4-[2-Carboxy-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-butyl ester 645378-27-4P, 4-[2-[[3,5-Bis(trifluoromethyl)benzyl](methyl)carbamoyl]-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-butyl ester 645378-29-6P, 4-[2-[(3,5-Dichlorobenzyl)(methyl)carbamoyl]-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-butyl ester 645378-39-8P, 4-[2-Methoxycarbonyl-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-butyl ester 645378-41-2P, 4-[2-[[1-(3,5-Dichlorophenyl)ethyl]methylcarbamoyl]-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-butyl ester 645378-52-5P, 1,1-Dimethylethyl 4-[(1R)-3-[(R)-1-[3,5-

bis(trifluoromethyl)phenyl]ethyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-53-6P,
1,1-Dimethylethyl
4-[(1S)-3-[[(R)-1-[3,5-bis(trifluoromethyl)phenyl]ethyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-54-7P, 1,1-Dimethylethyl 4-[(1S)-3-[[(S)-1-[3,5-bis(trifluoromethyl)phenyl]ethyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-55-8P,
1,1-Dimethylethyl 4-[3-[[1-[3,5-bis(trifluoromethyl)phenyl]-1-methylethyl]amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-56-9P, 1,1-Dimethylethyl 4-[3-[[1-[3,5-bis(trifluoromethyl)phenyl]-1-methylethyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-57-0P,
1,1-Dimethylethyl
4-[3-[[[3-bromo-4-(methyloxy)phenyl]methyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-59-2P, 1,1-Dimethylethyl 4-[3-[[[3,5-dimethylphenyl]methyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-60-5P, 1,1-Dimethylethyl 4-[3-[[[3,4-dibromophenyl]methyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-62-7P,
1,1-Dimethylethyl
4-[3-[[[3-fluoro-2-methylphenyl]methyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate 645378-65-0P,
1,1-Dimethylethyl
4-[3-[[[2-chloro-3-(trifluoromethyl)phenyl]methyl] (methyl)amino]-1-(4-fluorophenyl)-3-oxopropyl]-1-piperidinecarboxylate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

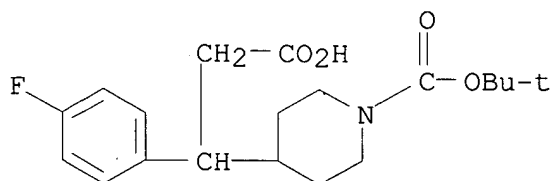
RACT

(Reactant or reagent)

(N-benzyl-3-Ph-3-heterocyclyl-propionamide compds. as tachykinin and/or serotonin reuptake inhibitors)

RN 645378-25-2 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -(4-fluorophenyl)- (9CI) (CA INDEX NAME)

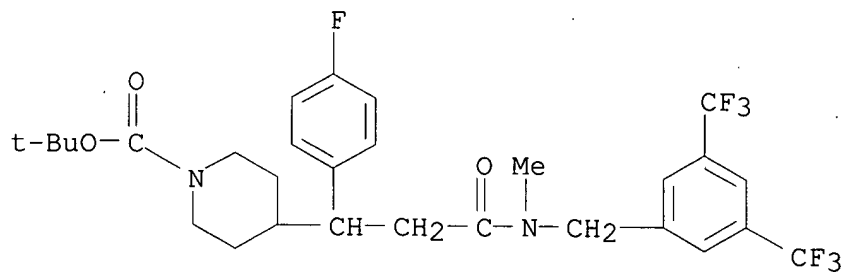


RN 645378-27-4 CAPLUS

CN 1-Piperidinecarboxylic acid,

4-[3-[[[3,5-bis(trifluoromethyl)phenyl]methyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

10/782,060

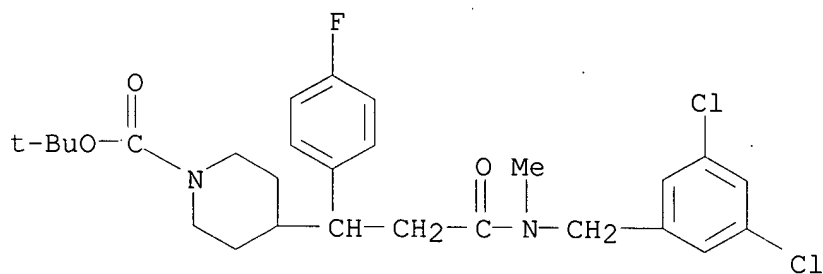


RN 645378-29-6 CAPLUS

CN 1-Piperidinecarboxylic acid,

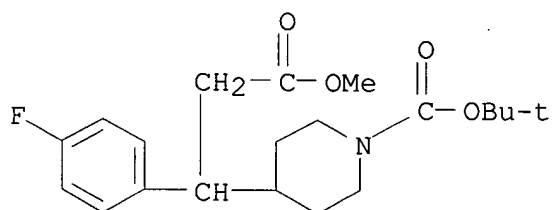
4-[3-[[(3,5-dichlorophenyl)methyl]methylamino

]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 645378-39-8 CAPLUS

CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]-β-(4-fluorophenyl)-, methyl ester (9CI) (CA INDEX NAME)



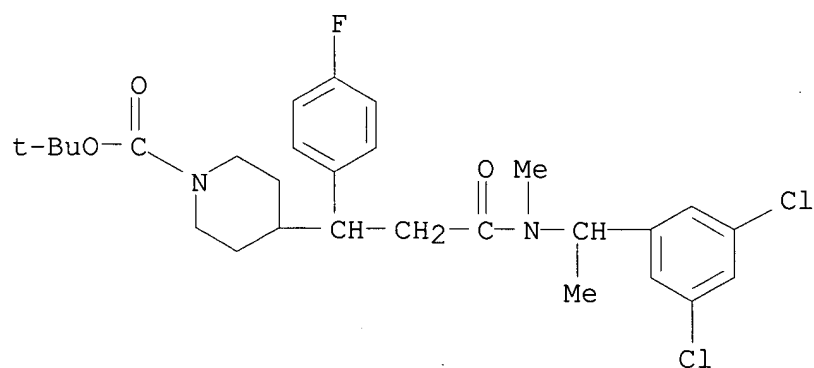
RN 645378-41-2 CAPLUS

CN 1-Piperidinecarboxylic acid,

4-[3-[[1-(3,5-dichlorophenyl)ethyl]methylamin

o]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

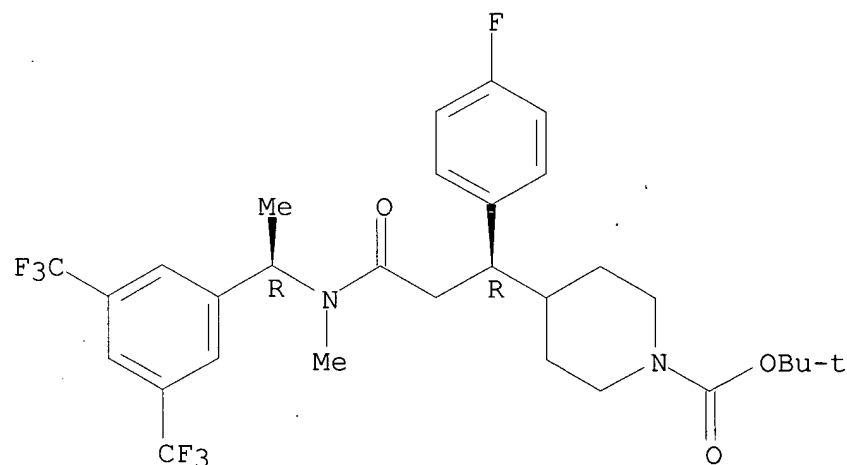
10/782,060



RN 645378-52-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1R)-3-[[[(1R)-1-[3,5-bis(trifluoromethyl)phenyl]ethyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

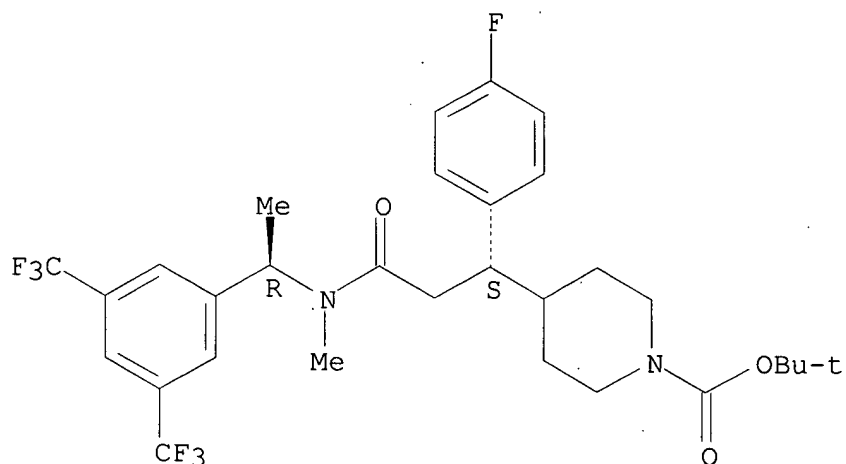


RN 645378-53-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1S)-3-[[[(1R)-1-[3,5-bis(trifluoromethyl)phenyl]ethyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

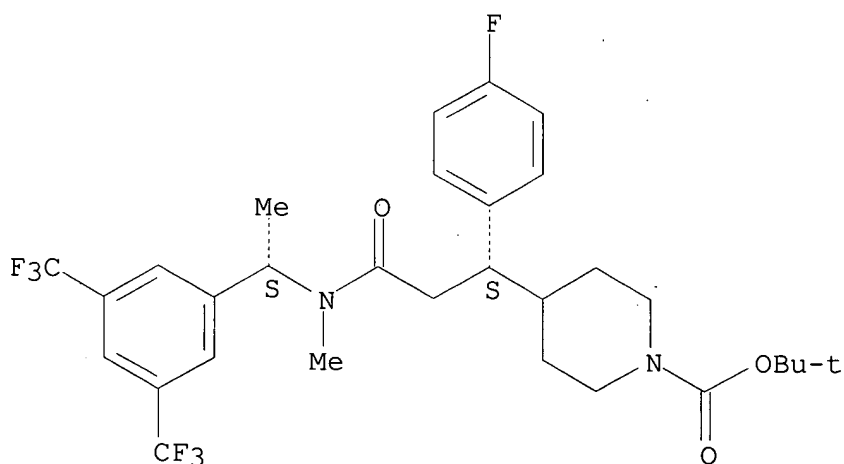
10/782,060



RN 645378-54-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1S)-3-[[[(1S)-1-[3,5-bis(trifluoromethyl)phenyl]ethyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

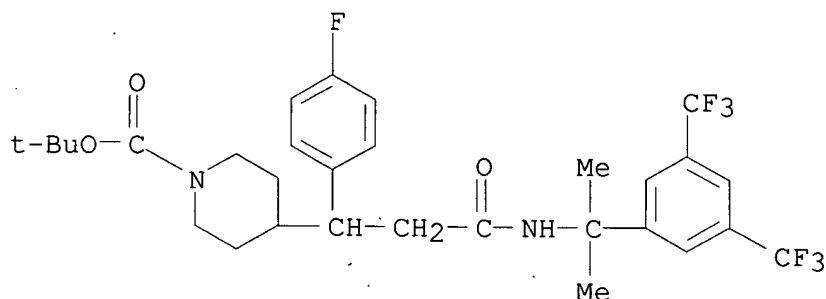
Absolute stereochemistry.



RN 645378-55-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[3-[[1-[3,5-bis(trifluoromethyl)phenyl]-1-methylethyl]amino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

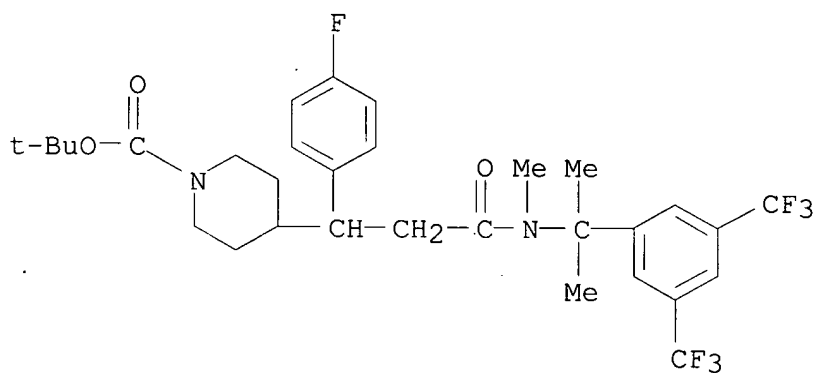
10/782,060



RN 645378-56-9 CAPLUS

CN 1-Piperidinecarboxylic acid,

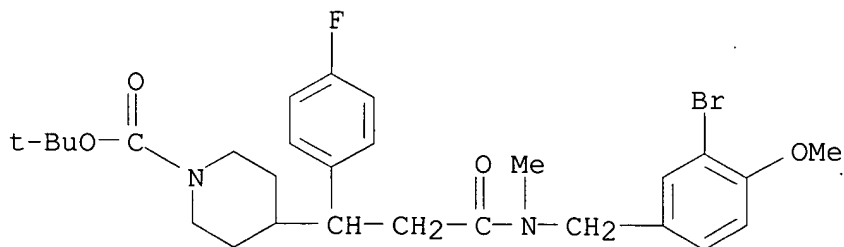
4-[3-[[1-[3,5-bis(trifluoromethyl)phenyl]-1-methylethyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 645378-57-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[3-[[3-bromo-4-

methoxyphenyl)methyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



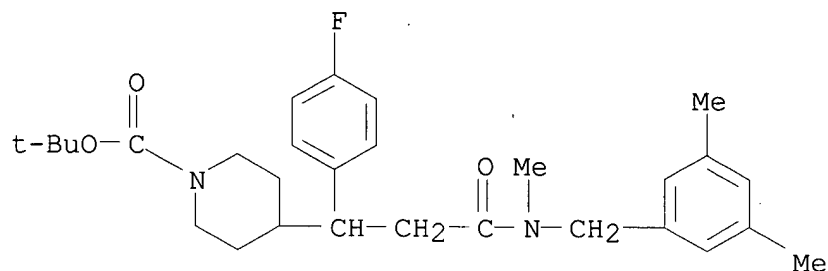
RN 645378-59-2 CAPLUS

CN 1-Piperidinecarboxylic acid,

4-[3-[[3,5-dimethylphenyl)methyl]methylamino

10/782,060

] -1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 645378-60-5 CAPLUS

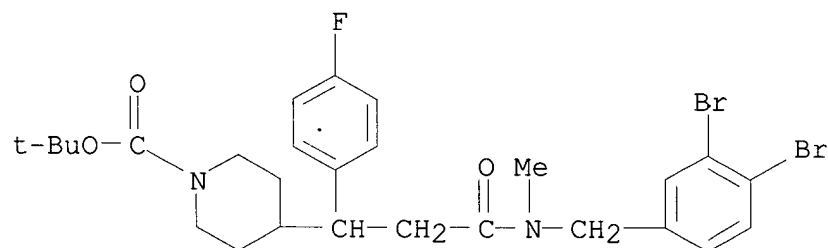
CN 1-Piperidinecarboxylic acid,

4-[3-[[(3,4-dibromophenyl)methyl]methylamino]-

1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA

INDEX

NAME)

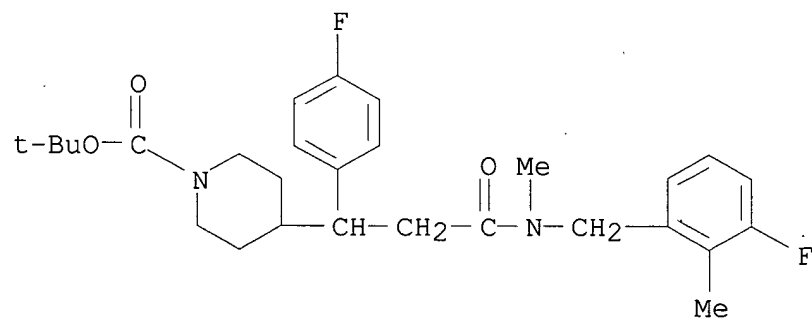


RN 645378-62-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[3-[[(3-fluoro-2-

methylphenyl)methyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-,

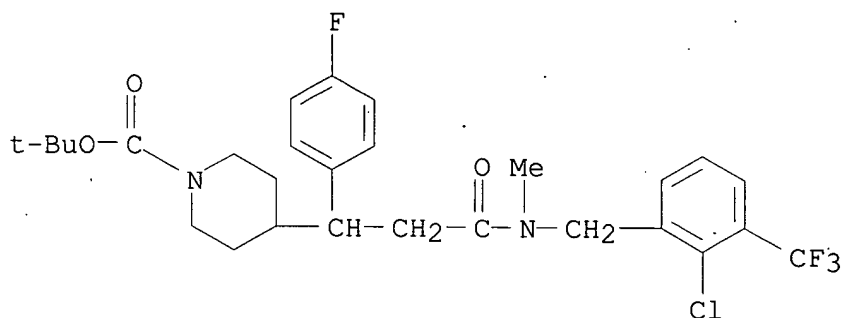
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 645378-65-0 CAPLUS

10/782,060

CN 1-Piperidinecarboxylic acid, 4-[3-[[[2-chloro-3-(trifluoromethyl)phenyl]methyl]methylamino]-1-(4-fluorophenyl)-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R = halo, alkyl, CN, alkoxy, etc.; R1 = 5-6-membered heteroaryl, etc.; R2 = H, alkyl; R3-4 = H, alkyl, cycloalkyl; R5 = CF3, SOO-2, etc.; L = single or double bond; n = 1-3; m = 0-3] are prepared

For

instance, 4-[2-Carboxy-1-(4-fluorophenyl)ethyl]piperidine-1-carboxylic acid tert-Bu ester (preparation given) is coupled to [3,5-bis(trifluoromethyl)benzyl]methylamine and deprotected to give II.

Compds. of the invention have pKi = 10.44 to 7.54 for the NK1

receptor. I

are useful in the treatment of conditions mediated by tachykinins and/or

by selective inhibition of serotonin reuptake transporter protein.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:236053 CAPLUS

DOCUMENT NUMBER: 139:117316

TITLE: Potent and selective aggrecanase inhibitors containing

cyclic P1 substituents

AUTHOR(S): Cherney, Robert J.; Mo, Ruowei; Meyer, Dayton T.; Wang, Li; Yao, Wenqing; Wasserman, Zelda R.; Liu, Rui-Qin; Covington, Maryanne B.; Tortorella, Micky

D.;

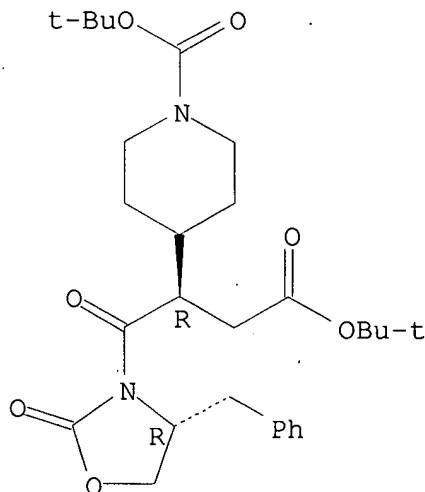
Arner, Elizabeth C.; Qian, Mingxin; Christ, David

D.;

10/782,060

Trzaskos, James M.; Newton, Robert C.; Magolda, Ron L.; Decicco, Carl P.
CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research
Institute, Princeton, NJ, 08543-4000, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003),
13(7), 1297-1300
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:117316
IT 561302-52-1P 561302-56-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)
(preparation, aggrecanase- and metalloproteinase-inhibiting
structure-activity relationship of cyclic PI substituted
hydroxamates)
RN 561302-52-1 CAPLUS
CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -[[(4R)-
2-oxo-4-(phenylmethyl)-3-oxazolidinyl]carbonyl]-, 1,1-dimethylethyl
ester,
(β R) - (9CI) (CA INDEX NAME)

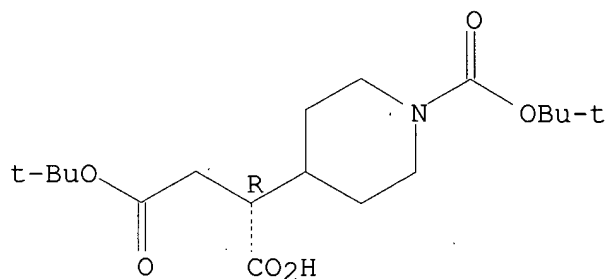
Absolute stereochemistry.



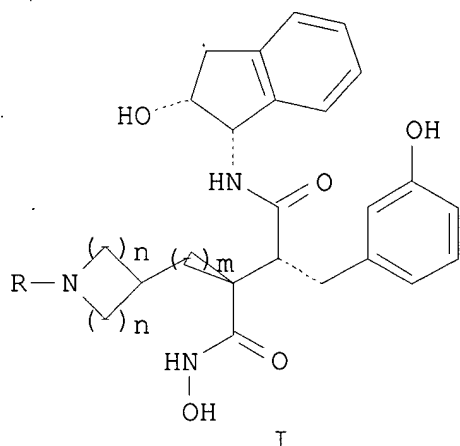
RN 561302-56-5 CAPLUS
CN Butanedioic acid, [1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]-,
4-(1,1-dimethylethyl) ester, (2R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/782,060



GI



AB Anti-succinate hydroxamates I (R = Boc, H, COMe, etc., m = 0, n = 1-2; R = COMe, COEt, m = 1, n = 2) with cyclic P1 motifs were prepared from substituted acetic acids as aggrecanase inhibitors. The N-methanesulfonyl piperidine I (R = SO₂Me, m = 0, n = 2) and the N-trifluoroacetyl azetidine I (R = COCF₃, m = 0, n = 1) were the most potent aggrecanase inhibitors both having an IC₅₀=3 nM while maintaining >100-fold selectivity over MMP-1, -2, and -9. The cyclic moieties were also capable of altering in vivo metabolism, hence delivering low clearance compds. in both rat and dog studies as shown for I (R = H, m = 0, n = 2).

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1999:511143 CAPLUS
 DOCUMENT NUMBER: 131:170361
 TITLE: Preparation of sulfonamides as inhibitors of
 activated
 blood coagulation factor X
 INVENTOR(S): Tawada, Hiroyuki; Itoh, Fumio; Banno, Hiroshi;
 Terashita, Zenichi
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 187 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

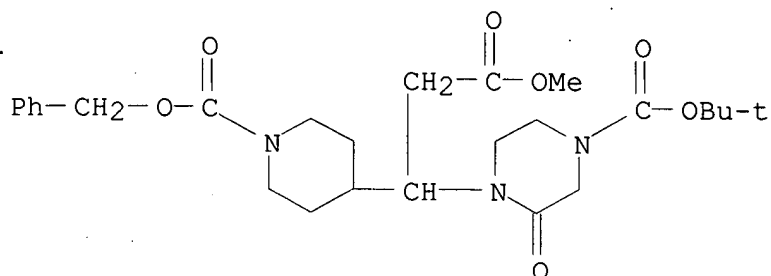
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940075	A1	19990812	WO 1999-JP470	19990204
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2317017	A1	19990812	CA 1999-2317017	19990204
AU 9922988	A	19990823	AU 1999-22988	19990204
JP 2000204081	A	20000725	JP 1999-27053	19990204
EP 1054005	A1	20001122	EP 1999-902829	19990204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6403595	B1	20020611	US 2000-601660	20000803
US 2002193382	A1	20021219	US 2002-128809	20020424
US 6680312	B2	20040120		
PRIORITY APPLN. INFO.:			JP 1998-24833	A 19980205
			JP 1998-317205	A 19981109
			WO 1999-JP470	W 19990204
			US 2000-601660	A3 20000803

OTHER SOURCE(S): MARPAT 131:170361
 IT 239073-60-0P 239073-61-1P 239073-62-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT
 (Reactant or reagent)
 (preparation of sulfonamides as inhibitors of activated blood
 coagulation
 factor X)

10/782,060

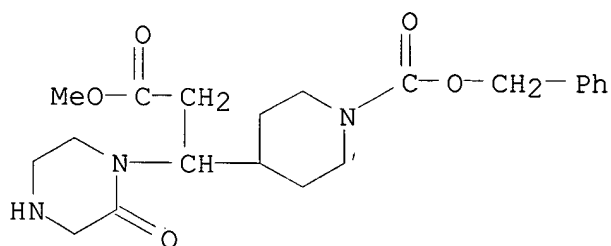
RN 239073-60-0 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[(1,1-dimethylethoxy)carbonyl]-2-oxo- β -[1-[(phenylmethoxy)carbonyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



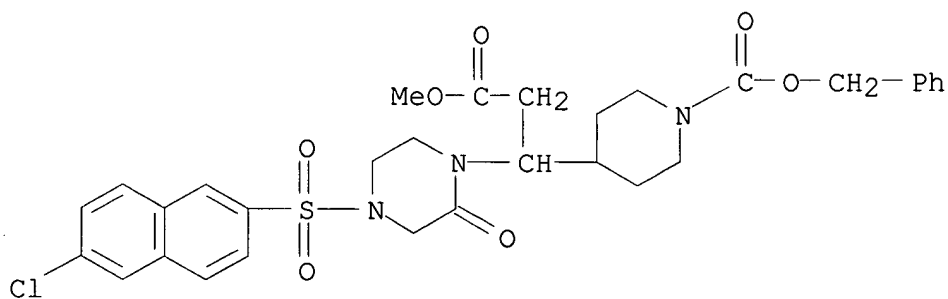
RN 239073-61-1 CAPLUS

CN 1-Piperazinepropanoic acid, 2-oxo- β -[1-[(phenylmethoxy)carbonyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)

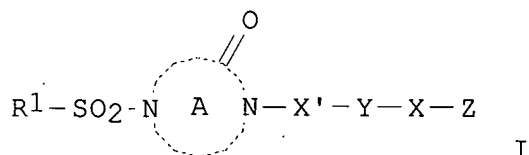


RN 239073-62-2 CAPLUS

CN 1-Piperazinepropanoic acid, 4-[(6-chloro-2-naphthalenyl)sulfonyl]-2-oxo- β -[1-[(phenylmethoxy)carbonyl]-4-piperidinyl]-, methyl ester (9CI) (CA INDEX NAME)



GI



AB The title compds. I [R¹ represents a hydrocarbyl or heterocyclic group each optionally substituted; the ring A represents a divalent nitrogen-containing heterocycle group optionally further substituted;

X' represents optionally substituted alkylene; Y represents an optionally substituted divalent cyclic group; X represents a bond or optionally substituted alkylene; and Z represents optionally substituted amino, optionally substituted imidoyl, or an optionally substituted nitrogen-containing heterocyclic group] are prepared Formulations containing a

compound of this invention are given. In a test for inhibiting activity of

title compds. against activated blood coagulation factor X, 1-(4-amidinobenzyl)-4-(6-chloronaphthalene-2-sulfonyl)-2-piperazinone hydrochloride showed IC₅₀ of 0.05 μM.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:324824 CAPLUS

DOCUMENT NUMBER: 129:27961

TITLE: Preparation of heterocyclyl-substituted piperazines for the prevention or treatment of a disease

mediated

by the binding of adhesion molecules to GPIIb/IIIa Mills, Stuart Dennett

INVENTOR(S):

PATENT ASSIGNEE(S): Zeneca Ltd., UK

SOURCE: U.S., 68 pp., Cont.-in-part of U.S. 5,563,141.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5753659	A	19980519	US 1995-458180	19950602
US 5563141	A	19961008	US 1994-218174	19940328
US 5750754	A	19980512	US 1996-658097	19960604
PRIORITY APPLN. INFO.:			GB 1993-6451	A 19930329

10/782,060

GB 1993-25610	A 19931215
US 1994-218174	A2 19940328
GB 1993-6453	A 19930329
GB 1993-25605	A 19931215
GB 1995-18188	A 19950907

IT 166951-31-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

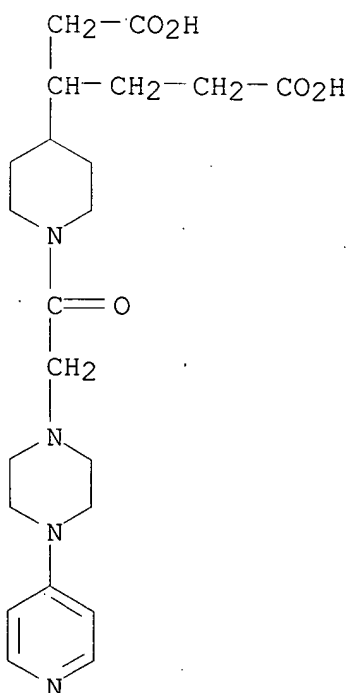
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclyl-substituted piperazines for the prevention or

treatment of a disease mediated by the binding of adhesion mols. to GPIIb/IIIa)

RN 166951-31-1 CAPLUS

CN Hexanedioic acid, 3-[1-[[4-(4-pyridinyl)-1-piperazinyl]acetyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



IT 207913-43-7

RL: RCT (Reactant); RACT (Reactant or reagent)

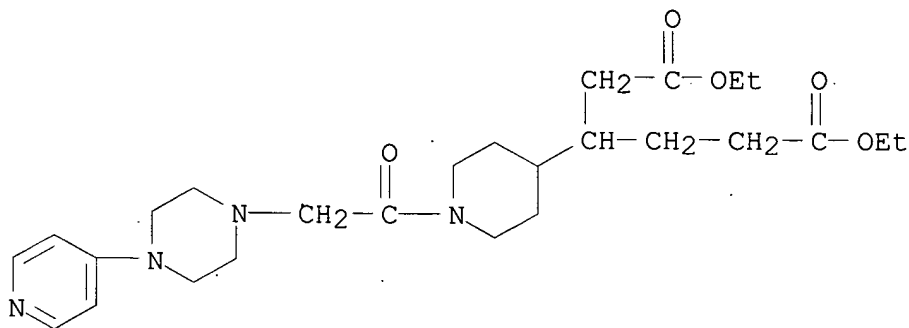
(preparation of heterocyclyl-substituted piperazines for the prevention or

10/782,060

treatment of a disease mediated by the binding of adhesion mols. to GPIIb/IIIa)

RN 207913-43-7 CAPLUS

CN Hexanedioic acid, 3-[1-[[4-(4-pyridinyl)-1-piperazinyl]acetyl]-4-piperidinyl]-, diethyl ester (9CI) (CA INDEX NAME)



AB The title compds. [(M1)n-Q-(M2)1-n-L-A; n = 0-1; M1 = NH2; Q = an aromatic heterocyclic group containing N atom; M2 = imino; L = template; A = an acidic group, or its ester or amide, or sulfonamide] and their pharmaceutically acceptable salts and pro-drugs, useful for the prevention or treatment of a disease mediated by the binding of adhesion mols. to GPIIb/IIIa, for the inhibition of platelet aggregation, and for the treatment of unstable angina. Thus, reaction of Me 4-bromoacetylphenoxyacetate with 1-(4-pyridyl)piperazine in MeCN afforded Me 4-{2-[4-(4-pyridyl)piperazin-1-yl]acetyl}phenoxyacetate which showed pIC50 of 5.8-6.4 against binding of fibrinogen to GPIIb/IIIa.

REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:126254 CAPLUS

DOCUMENT NUMBER: 128:204878

TITLE: Preparation of pyrazinobenzothiazine derivatives and

analogues for the treatment of inflammation and autoimmune diseases

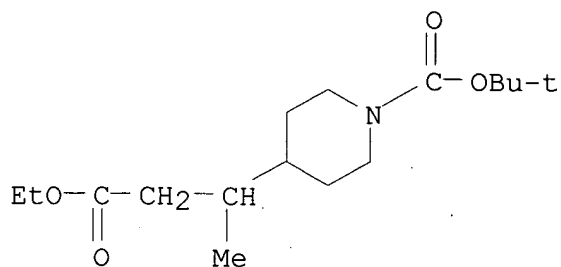
INVENTOR(S): Kaneko, Toshihiko; Clark, Richard; Ohi, Norihito; Ozaki, Fumihiko; Kawahara, Tetsuya; Kamada, Atsushi;

10/782,060

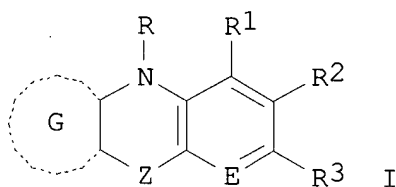
Okano, Kazuo; Yokohama, Hiromitsu; Muramoto, Kenzo;
Arai, Tohru; Ohkuro, Masayoshi; Takenaka, Osamu;
Sonoda, Jiro
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 1344 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 9806720	A1	19980219	WO 1997-JP2787	19970808
W: AU, CA, CN, HU, JP, KR, MX, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
PT, SE				
CA 2262569	A1	19980219	CA 1997-2262569	19970808
AU 9737849	A	19980306	AU 1997-37849	19970808
ZA 9707103	A	19990208	ZA 1997-7103	19970808
EP 934941	A1	19990811	EP 1997-934750	19970808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT,				
IE, FI				
US 6518423	B1	20030211	US 1999-230852	19990405
US 2004092737	A1	20040513	US 2002-247310	20020920
PRIORITY APPLN. INFO.:			JP 1996-210344	A 19960809
			WO 1997-JP2787	W 19970808
			US 1999-230852	A3 19990405

OTHER SOURCE(S): MARPAT 128:204878
IT 203662-40-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)
(preparation of pyrazinobenzothiazine derivs. and analogs for
treatment of
inflammation and autoimmune diseases)
RN 203662-40-2 CAPLUS
CN 4-Piperidinepropanoic acid, 1-[(1,1-dimethylethoxy)carbonyl]- β -methyl-
, ethyl ester (9CI) (CA INDEX NAME)



GI



AB The title compds. I [R1 to R3 are the same or different and each represents hydrogen, optionally substituted lower alkyl, optionally substituted cycloalkyl, etc., provided that when R1 to R3 are all optionally substituted lower alkyl groups, they do not simultaneously represent Me groups; R represents hydrogen, lower alkyl, etc.; E represents N, C, etc.; Z represents O, S, SO, SO2, etc.; and the ring G represents an optionally substituted heteroaryl ring having at least

one

nitrogen atom] are prepared I are useful in the treatment and prevention of

inflammatory immunol. diseases, autoimmune diseases, rheumatism, collagen

disease, asthma, nephritis, ischemic reflow disorders, psoriasis, atopic

dermatitis or rejection reactions following organ transplantation. The compound (syn)-[3-(10H-pyrazino[2,3-b][1,4]benzothiazin-8-ylmethyl)-3-azabicyclo[3.3.1]nona-9-yl]acetic acid (II) at 10 mg/kg orally gave 65% inhibition of carrageenin-induced inflammation in rats. II in vitro showed IC50 of 2.3 μ M against the expression of ICAM-1.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:758624 CAPLUS

DOCUMENT NUMBER: 123:169654

TITLE: Preparation of heterocyclic compounds as platelet

10/782,060

INVENTOR(S): aggregation inhibitors
Wayne, Michael Garth; Smithers, Michael James;
Rayner;
John Wall; Faull, Alan Wellington; Pearce, Robert
Eden; James; Brewster, Andrew George; Shute, Richard
Mills, Stuart Dennett; Caulkett, Peter William
Rodney
PATENT ASSIGNEE(S): Zeneca Ltd., UK
SOURCE: PCT Int. Appl., 236 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9422835	A2	19941013	WO 1994-GB648	19940328
WO 9422835	A3	19941222		
W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TT, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2155307	A1	19941013	CA 1994-2155307	19940328
AU 9462890	A	19941024	AU 1994-62890	19940328
AU 692439	B2	19980611		
EP 690847	A1	19960110	EP 1994-910495	19940328
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08509967	T	19961022	JP 1994-521811	19940328
JP 3088016	B2	20000918		
US 5750754	A	19980512	US 1996-658097	19960604
PRIORITY APPLN. INFO.:			GB 1993-6451	A 19930329
			GB 1993-25610	A 19931215
			GB 1993-6453	A 19930329
			GB 1993-25605	A 19931215
			WO 1994-GB648	W 19940328
			GB 1995-18188	A 19950907

OTHER SOURCE(S): MARPAT 123:169654
IT 166951-31-1P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
use);

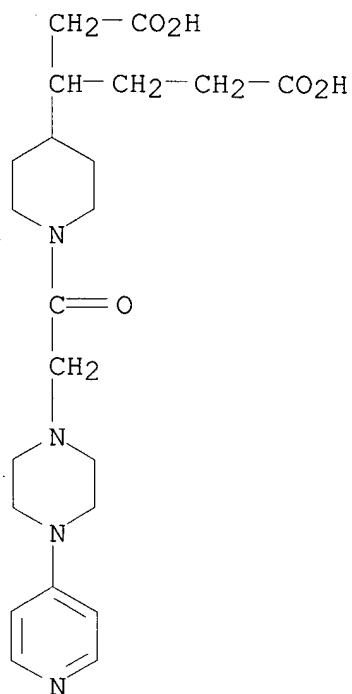
10/782,060

BIOL (Biological study); PREP (Preparation); USES (Uses)

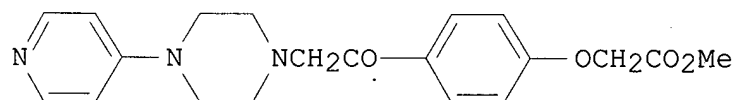
(preparation of heterocyclic compds. as platelet aggregation inhibitors)

RN 166951-31-1 CAPLUS

CN Hexanedioic acid, 3-[1-[[4-(4-pyridinyl)-1-piperazinyl]acetyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



GI



I

AB Title compds. [I; (M1)nQ(M2)1-nLA wherein = 0, 1; M1 = amino; Q = N-heterocyclyl; M2 = imino; L = template; A = an acidic group, or ester,

amide derivative, sulfonamide] and pharmaceutically acceptable salts and

pro-drugs thereof are prepared Me 4-(bromoacetyl)phenoxyacetate in MeCN was

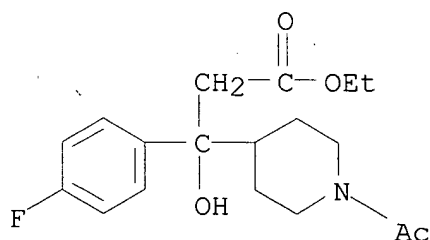
added to 1-(4-pyridyl)piperazine in MeCN to give the title compd II. Platelet aggregation inhibition was demonstrated by I. Pharmaceutical formulations comprising I are given.

10/782,060

L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1982:406179 CAPLUS
DOCUMENT NUMBER: 97:6179
TITLE: 4-Aryl-1-oxa-8-azaspiro[4.5]dec-3-en-2-ones
INVENTOR(S): Brown, John J.; Hardy, Robert A., Jr.
PATENT ASSIGNEE(S): American Cyanamid Co. , USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

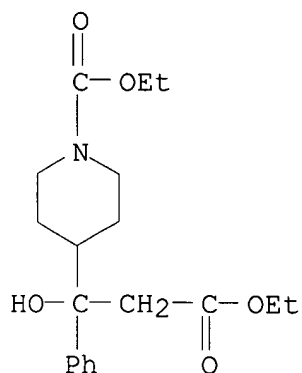
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4321379	A	19820323	US 1981-229043	19810128
PRIORITY APPLN. INFO.:			US 1981-229043	19810128

OTHER SOURCE(S): CASREACT 97:6179; MARPAT 97:6179
IT 82074-13-3P 82074-38-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)
(preparation and cyclization of)
RN 82074-13-3 CAPLUS
CN 4-Piperidinepropanoic acid, 1-acetyl- β -(4-fluorophenyl)- β -hydroxy-, ethyl ester (9CI) (CA INDEX NAME)

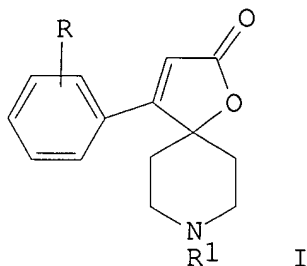


RN 82074-38-2 CAPLUS
CN 4-Piperidinepropanoic acid, 1-(ethoxycarbonyl)- β -hydroxy- β -phenyl-, ethyl ester (9CI) (CA INDEX NAME)

10/782,060



GI

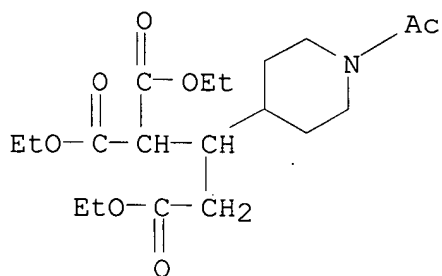


AB Analgesic and neuroleptic (no data) oxaazaspirodecenones I [R = H, F, Cl, CF₃; R₁ = H, (un)substituted alkyl, acyl] and their 3,4-dihydro derivs. were prepared Thus 1-acetyl-4-(4-fluorobenzoyl)piperidine was treated with BrCH₂CO₂Et, followed by cyclization with H₂SO₄, to give I (R = 4-F, R₁ = Ac).

L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1954:71735 CAPLUS
DOCUMENT NUMBER: 48:71735
ORIGINAL REFERENCE NO.: 48:12744h
TITLE: Synthesis of 2,3-substituted quinuclidines
AUTHOR(S): Rubtsov, M. V.; Mikhлина, E. E.
SOURCE: Zhurnal Obshchei Khimii (1953), 23, 861-5
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 873375-47-4P, 1,1,3-Propanetricarboxylic acid,
2-(1-acetyl-4-piperidyl)-, triethyl ester
RL: PREP (Preparation)

10/782,060

(preparation of)
RN 873375-47-4 CAPLUS
CN 1,1,3-Propanetricarboxylic acid, 2-(1-acetyl-4-piperidyl)-, triethyl
ester
(5CI) (CA INDEX NAME)



AB See C.A. 48, 3978a.

L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1954:71734 CAPLUS

DOCUMENT NUMBER: 48:71734

ORIGINAL REFERENCE NO.: 48:12744g-h

TITLE: Relative basicities of atoms of nitrogen in
compounds

of the type of 2-aminopyridine and
N-alkyl-2-pyridonimine

AUTHOR(S): Gol'dfarb, Ya. L.; Pryanishnikova, M. A.; Zhukova,
K.

A.

SOURCE: Bulletin of the Academy of Sciences of the USSR,
Division of Chemical Science (English Translation)
(1953) 129-35

CODEN: BACCAT; ISSN: 0568-5230

DOCUMENT TYPE: Journal

LANGUAGE: English

IT 873375-47-4P, 1,1,3-Propanetricarboxylic acid,
2-(1-acetyl-4-piperidyl)-, triethyl ester

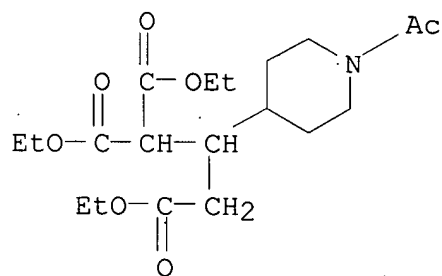
RL: PREP (Preparation)
(preparation of)

RN 873375-47-4 CAPLUS

CN 1,1,3-Propanetricarboxylic acid, 2-(1-acetyl-4-piperidyl)-, triethyl
ester

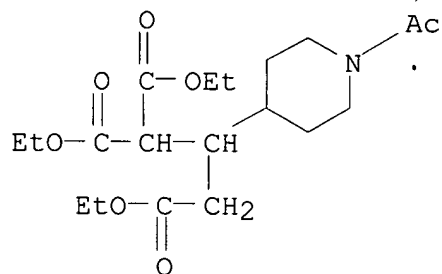
(5CI) (CA INDEX NAME)

10/782,060



AB See C.A. 48, 3358i.

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1954:49458 CAPLUS
DOCUMENT NUMBER: 48:49458
ORIGINAL REFERENCE NO.: 48:8782a-d
TITLE: Synthesis of 2,3-disubstituted quinuclidines
AUTHOR(S): Rubtsov, M. V.; Mikhlin, E. E.
CORPORATE SOURCE: S. Ordzhonikidze All-Union Chem.-Pharm. Inst.,
Moscow
SOURCE: Doklady Akademii Nauk SSSR (1953), 88, 1003-6
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT 873375-47-4P, 1,1,3-Propanetricarboxylic acid,
2-(1-acetyl-4-piperidyl)-, triethyl ester
RL: PREP (Preparation)
(preparation of)
RN 873375-47-4 CAPLUS
CN 1,1,3-Propanetricarboxylic acid, 2-(1-acetyl-4-piperidyl)-, triethyl
ester
(5CI) (CA INDEX NAME)



AB cf. C.A. 48, 3978a. Condensation of an equimolar mixture of
CH₂(CO₂Et)₂ and
Et 3-(4-pyridyl)acrylate in EtOH with EtONa catalyst 5-6 hrs. at room
temperature or 1 hr. at 60° gave 94% Et 3-dicarbethoxymethyl-3-(4-
pyridyl)propionate (I), b_{0.2} 173-5° (some decomposition). This boiled

with concentrated HCl gave 3-(4-pyridyl)glutaric acid, identified as the di-Et

ester, b0.2 146-8°. I.HCl was hydrogenated over PtO₂ at room temperature

in EtOH to the piperidine analog (II), noncryst. mass decomposing on attempted distillation; heated with Ac₂O it gave Et

3-dicarbethoxymethyl-3-(1-

acetyl-4-piperidyl)propionate, b0.3 206-7°. II with Br gave Et

3-dicarbethoxybromomethyl-3-(4-piperidyl)propionate, which with hot pyridine gave 72% Et (2,2-dicarbethoxy-3-quinuclidyl)acetate, b0.25

147-8°, n₂₀D 1.4793; methiodide, m. 139-41° (from

EtOH-Et₂O). Refluxed 16 hrs. with concentrated HCl the ester gave

91.5%

(2-carboxy-3-quinuclidyl)acetic acid-HCl, decompose 254-5°. The

calculated amount of alc. NH₃ gave 87% free acid (III), m. 273°,

soluble in

H₂O, nearly insol. in absolute EtOH; isolation of the acid through the Ag salt

gave but 43.8% yield owing to the insoly. of the Ag salt. The acid

with

EtOH-HCl or the acyl chloride with EtOH gave the di-Et ester, b0.3

126°, n₂₀D 1.4797. This with LiAlH₄ gave 88.7%

2-hydroxymethyl-3-(2-hydroxyethyl)quinuclidine, b0.4 156-7°,

yielding with SOCl₂ the 2-chloromethyl-3-(2-chloroethyl)quinuclidine,

b0.25 120-2°, which on standing forms a spongy solid, probably a

polymer; this process is accelerated by heat (distillation). Heating

the acyl

dichloride of III.HCl with Et₂NCH₂CH₂OH yields bis(diethylaminoethyl)

ester of III, b0.3 187-9° (methiodide, decompose 197-9°).

L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1954:21861 CAPLUS

DOCUMENT NUMBER: 48:21861

ORIGINAL REFERENCE NO.: 48:3978a-f

TITLE: Synthesis of 2,3-substituted quinuclidines

AUTHOR(S): Rubtsov, M. V.; Mikhlin, E. E.

CORPORATE SOURCE: S. Ordzhonikidze All-Union Chem.-Pharm. Inst., Moscow

SOURCE: Zhurnal Obshchei Khimii (1953), 23, 823-8

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 48:21861

IT 873375-47-4P, 1,1,3-Propanetricarboxylic acid,

2-(1-acetyl-4-piperidyl)-, triethyl ester

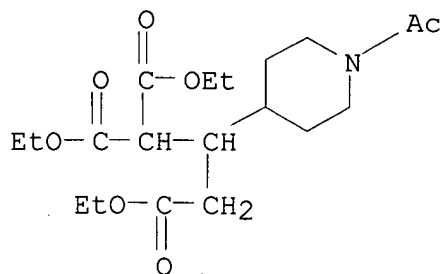
RL: PREP (Preparation)

(preparation of)

RN 873375-47-4 CAPLUS

CN 1,1,3-Propanetricarboxylic acid, 2-(1-acetyl-4-piperidyl)-, triethyl ester.

(5CI) (CA INDEX NAME)



AB To 1.25 g. Na in 20 ml. absolute EtOH was added 8.7 g. $\text{CH}_2(\text{CO}_2\text{Et})_2$ and 9.6 g. Et 4-pyridineacrylate, and the mixture stirred 1 hr. at 60° and treated with very dilute AcOH and extracted with Et₂O, yielding 94.2% Et β -[bis(ethoxycarbonyl)methyl]-4-pyridinepropionate, b0.2 $173-5^\circ$ (some decomposition); HCl salt (I), m. $121-2^\circ$ (from EtOH-Et₂O). This (4.4 g.) refluxed 8 hrs. with 44 ml. concentrated HCl gave 3-(4-pyridyl)glutaric acid-HCl, which, heated 3 hrs. with 35 ml. 5% alc. HCl, concentrated in vacuo, treated with K_2CO_3 , and extracted with Et₂O, yielded 84.4% di-Et ester, b0.2 $146-8^\circ$, I reduced over Pt oxide in EtOH to Et β -[bis(ethoxycarbonyl)methyl]-4-piperidinepropionate, isolated as the HCl salt (II), a taffy-like mass; the free base is amorphous; treatment with Ac₂O gave the 1-Ac derivative, b0.3 $206-7^\circ$. II (from 47.8 g. pyridine analog) in dry CHCl_3 treated over 8 hrs. with 20.4 g. Br in CHCl_3 , allowed to stand 12-14 hrs., concentrated, treated with H_2O and K_2CO_3 , and extracted with Et₂O yielded crude Et β -[bis(ethoxycarbonyl)bromomethyl]-4-piperidinepropionate, which, boiled 2 hrs. with 390 ml. pyridine, concentrated, and treated with 50% K_2CO_3 gave 72% Et 2,2-dicarbethoxy-3-quinuclidineacetate, b0.25 $147-8^\circ$; methiodide, m. $139-41^\circ$ (from EtOH-Et₂O). The ester refluxed 16 hrs. with concentrated HCl gave 2-carboxy-3-quinuclidineacetic acid-HCl (III), decompose $253-4^\circ$ (from aqueous Me_2CO); the pure product decompose $254-5^\circ$ (from EtOH-Et₂O). This (0.4 g.) 1.1 g. Ag_2O , and 6 ml. H_2O shaken 2 hrs., diluted, heated to the b.p., filtered, saturated with H_2S , filtered, and evaporated gave 43.8% 2-carboxy-3-quinuclidineacetic acid, m. $265-7^\circ$; an 87.6% yield is obtained with alc. NH_3 . III (7 g.) heated with 100 ml. SOCl_2 10 hrs. at 70° , freed of SOCl_2 , and the resulting acyl chloride-HCl (IV) refluxed 3 hrs. with EtOH gave 82.7% di-Et 2-carboxy-3-

10/782,060

quinuclidineacetate, b0.3 126°, n20D 1.4797, (also obtained from III and 5% alc. HCl refluxed 6 hrs.); methiodide, m. 140-1° (from EtOH-Et2O). The ester (8.2 g.) in Et2O treated with 4.64 g. LiAlH4 suspended in Et2O, boiled 1 hr., and treated with 9 ml. H2O gave 88.7% 2-hydroxymethyl-3-(2-hydroxyethyl)quinuclidine, b0.4 156-7°; HCl salt, hygroscopic solid. The latter (5.22 g.) in dry CHCl3 treated with 18 ml. SOCl2, boiled 0.5 hr., and concentrated in vacuo, gave 94% 2-chloromethyl-3-(2-chloroethyl)quinuclidine-HCl, m. 139-40°; with 50% K2CO3 it gave the free base, b0.25 120-2°, which forms a methiodide, m. 136°. IV (from 3 g. acid HCl salt) and 40 ml. Et2NCH2CH2OH kept 3.5 hrs. at 80-5° gave 63% bis(2-diethylaminoethyl) ester, b0.3 187-9°, of 2-carboxy-3-quinuclidineacetic acid; trimethiodide, decompose 197-9°.

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
116.41	288.72

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-17.16	-17.16

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 14:48:21 ON 10 FEB 2007